



US Army Corps  
of Engineers  
Waterways Experiment  
Station

AD-A286 846



Technical Report CERC-94-3  
September 1995

## SUPERTANK Laboratory Data Collection Project

### Volume II: Appendices A - I

*edited by Jane McKee Smith, Nicholas C. Kraus*

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96-00361



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96 2 20 002

Prepared for Headquarters, U.S. Army Corps of Engineers

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## **Volume II: Appendices A - I**

edited by     Jane McKee Smith, Nicholas C. Kraus  
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                 Waterways Experiment Station  
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**Final report**

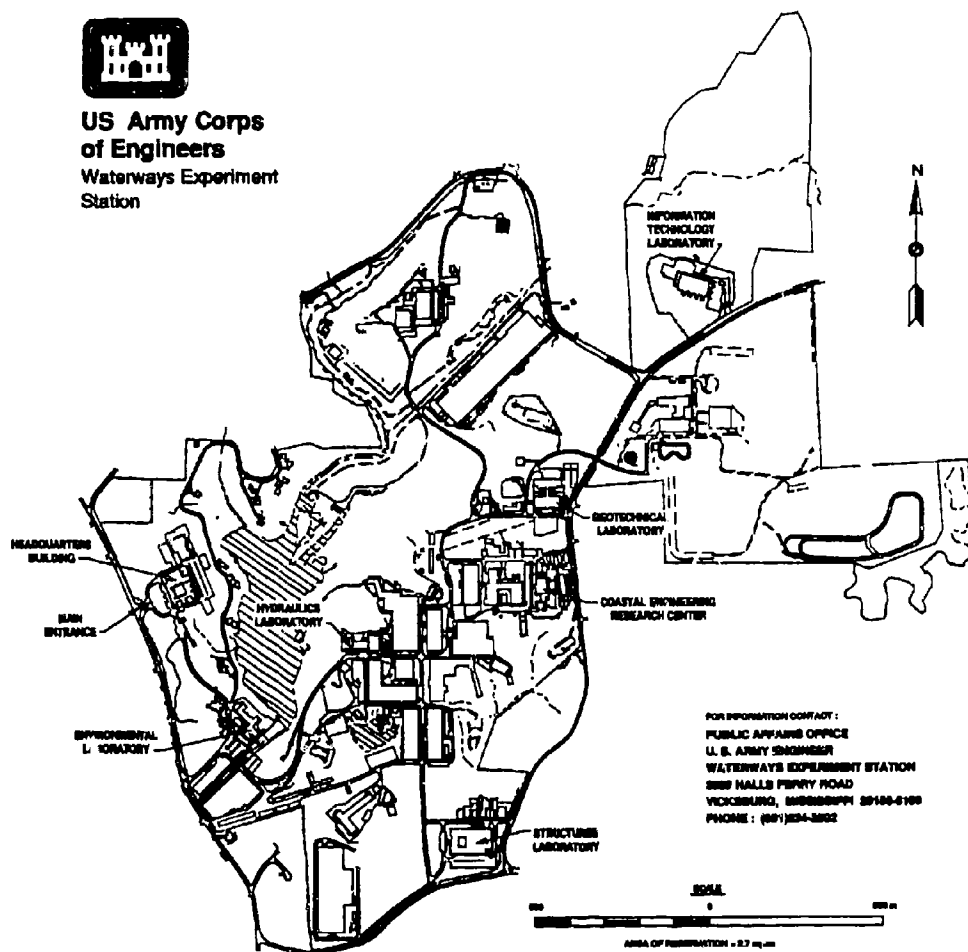
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**Prepared for     U.S. Army Corps of Engineers  
                 Washington, DC 20314-1000**

**Under     Work Units 32464, 32530, 31672**



**US Army Corps  
of Engineers**  
Waterways Experiment  
Station



**Waterways Experiment Station Cataloging-in-Publication Data**

SUPERTANK Laboratory Data Collection Project. Volume II, Appendices A-I / edited by Jane McKee Smith, Nicholas C. Kraus ; prepared for U.S. Army Corps of Engineers.

241 p. : ill. ; 28 cm. — (Technical report ; CERC-94-3 v.2)

Report 2 of a series.

1. Coast changes — Mathematical models. 2. Sediment transport — Mathematical models. 3. Beach erosion — Statistical methods. I. Smith, Jane McKee. II. Kraus, Nicholas C. III. United States. Army. Corps of Engineers. IV. U.S. Army Engineer Waterways Experiment Station. V. Coastal Engineering Research Center (U.S. Army Engineer Waterways Experiment Station) VI. Series: Technical report (U.S. Army Engineer Waterways Experiment Station) ; CERC-94-3 v.2.  
TA7 W34 no.CERC-94-3 v.2

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# Preface

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This study was conducted as a joint effort of the Coastal Engineering Research and Development Program (CERDP) and the Dredging Research Program (DRP) authorized by Headquarters, U.S. Army Corps of Engineers (HQUSACE) through research work units administered at the U.S. Army Engineer Waterways Experiment Station (WES), Coastal Engineering Research Center (CERC). The CERDP portion of the study was conducted under the Calculation of Cross-Shore Sediment Transport and Beach Profile Change Work Unit 32530 and the Nearshore Waves and Currents Work Unit 31672. The DRP portion of the study was conducted under the Calculation of Boundary Layer Properties (Noncohesive Sediments) Work Unit 32463 and the Open Water Disposal Site Planning Management and Design Work Unit 32489. HQUSACE Technical Monitors were Messrs. John H. Lockhart, Jr., John G. Housley, Barry W. Holliday, and David A. Roellig for the CERDP, and Messrs. Robert H. Campbell, John H. Lockhart, Jr., and David B. Mathis for the DRP. Ms. Carolyn M. Holmes (CERC) was CERDP Program Manager (PM), and Mr. E. Clark McNair, Jr., (CERC) and Dr. Lyndell Z. Hales (CERC) were DRP PM and Assistant PM, respectively.

This two-volume report provides information and data documenting a coastal processes data collection project called the SUPERTANK Data Collection Project performed at the O.H. Hinsdale Wave Research Laboratory, Oregon State University, over the period 29 July to 20 September 1991. The project was conducted as a multidisciplinary and multi-institutional cooperative effort in which the investigators shared instrumentation and expertise. Volume I of this report contains narrative and example results of major data collection activities and is presented in independent chapters written by the investigators who participated in the project. Chapter 1 of Volume I provides an overview of the project and the activities of all investigators. Volume II contains appendices summarizing properties of the data sets collected and was also prepared by the individual investigators.

Technical editors for this report were Ms. Jane McKee Smith, Research Hydraulic Engineer, Coastal Processes Branch (CPB), Research Division (RD), CERC, and Dr. Nicholas C. Kraus, Senior Scientist (CERC), who were also the CERC technical leaders of the SUPERTANK project. This report was prepared under the general administrative supervision of Dr. James R. Houston, Director, CERC; Mr. Charles C. Calhoun, Jr., Assistant Director,

CERC; Mr. H. Lee Butler, Chief, RD, CERC; and Mr. Bruce A. Ebersole, Chief, CPB, RD, CERC. Ms. Allison Abbe, CPB, RD, CERC, assisted in text formatting.

At the time of publication of this report, Director of WES was Dr. Robert W. Whalin. Commander was COL Bruce K. Howard, EN.

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# Conversion Factors

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Non-SI units of measurement used in this report can be converted to SI units as follows:

Multiply	By	To Obtain
feet	0.3048	meters
inches	0.0254	meters



# Appendix A Test Series Listing and Calibrations at SUPERTANK<sup>1</sup>

*by Jane McKee Smith and Nicholas C. Kraus*

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<sup>1</sup> A table of factors for converting non-SI units of measurement to SI units is presented on page vi.

**Table A1**  
**SUPERTANK Test Series**

Run	Time	Dur min	T <sub>p</sub> sec	H <sub>m</sub> m	γ	Elev ft	Pos in.	Ref Sta	Comments
ST_10: EQUILIBRIUM EROSION (RANDOM)									
AUG 05	900	INITIAL SURVEY							
A0509A	945	20	3	0.8	20	13.58	87.	9	
A0510A	1045	40	3	0.8	20	13.58	87.75	9	
A0512A	1230	70	3	0.8	20	13.58	87.375	9	
A0515A	1520	70	3	0.8	20	10.58	87.25	9	CM17 RAISED BY 6" BEFORE RUN
A0517A	1730	70	3	0.8	20	13.58	88.75	9	
AUG 06	720	INITIAL SURVEY							
A0608A	805	20	3	0.8	3.3	13.58	88.5	9	CM1 RAISED BY 6" BEFORE RUN
A0609A	945	40	3	0.8	3.3	13.58	88.	9	
A0611A	1100	70	3	0.8	3.3	13.58	88.25	9	
A0613A	1335	70	3	0.8	MON	13.13	122.5	8	SAMP RATE = 0.06 SEC
A0615A	1558	20	3	0.8	3.3	13.58	86.	9	FORESHORE RESHAPED BEFORE RUN; CM1 BURIED AFTER RUN
A0617A	1725	20	3	0.8	3.3	13.58	89.5	9	W.L. @ 9.5 FT CM1 & 18 LOWERED 6"
A0618A	1822	40	3	0.8	3.3	13.58	88.75	9	W.L. @ 9.5 FT CM17 LOOSE AFTER RUN
AUG 07	745	INITIAL SURVEY							
A0709A	955	4	4.5	0.8	20	13.58	123.	8	CM18 AND 4 UP 8" CM17 TIGHTENED CM1, 2, 6, & 5 UP 6"
A0710A	1015	20	4.5	0.8	20	13.58	123.	8	
A0711A	1120	40	4.5	0.8	20	13.58	65.25	9	
A0713A	1305	70	4.5	0.8	20	13.58	74.5	9	
A0715A	1500	70	4.5	0.8	20	13.58	106.5	9	
A0717A	1700	70	4.5	0.8	20	13.58	148.75	9	
A0719A	1910	5	4.5	0.15	MON	13.58	149.25	9	NOT SURVEYED
A0719B	1930	5	4.5	0.8	20	13.58	149.25	9	NOT SURVEYED
AUG 08	700	INITIAL SURVEY							
A0808A	830	40	4.5	0.8	3.3	13.58	47.5	9	MOVED CM5 UP 6"
A0809A	950	70	4.5	0.8	3.3	13.58	48.	9	

**Table A1**  
**SUPERTANK Test Series**

Run	Time	Dur min	T <sub>p</sub> sec	H <sub>ms</sub> m	r	Elev ft	Pos in.	Ref Sta	Comments
A0812A	1240	20	4.5	0.8	3.3	13.95	4.	13	
A0814A	1425	20	4.5	0.8	3.3	12.14	81.	8	
A0815A	1530	20	4.5	0.8	3.3	13.85	89.	9	
A0816A	1625	20	4.5	0.8	MON	13.85	88.25	9	
A0817A	1730	20	4.5	0.8	MON	11.98	15.	9	
AUG 09	730	INITIAL SURVEY							
A0907A	756	5	ZEROS FOR CAL (10 FT)				APRX	21	
A0908A	835	40	6	0.8	3.3	13.73	88.25	9	
A0910A	1010	40	5	0.5	3.3	13.73	88.25	9	
A0911A	1130	40	3	0.7	3.3	13.73	87.75	9	
A0912A	1255	40	3	0.9	3.3	13.73	84.75	9	
A0914A	1415	40	4.5	0.9	3.3	13.73	104.5	9	
A0915A	1535	40	5	0.7	3.3	13.73	81.25	9	DATA LOST
A0916A	1655	5	3	1.2/ 1.5	MON	13.73	217.5	9	
A0917A	CALIBRATION FOR WAVE GAGES								
AUG 10	NEW METER DEPLOYMENT FOR ACCRETIONARY SERIES								
AUG 11 1500 REGRADE BEACH, USE AS INITIAL PROFILE									
ST 20: ACOUSTIC PROFILERS (RANDOM; MONOCHROMATIC)									
A1208A	848	5	ZEROS FOR CAL (10 FT)						
A1209A	910	40	8	0.2	3.3	12.55	66.5	9	
A1211A	1115	40	8	0.2	MON	12.55	68.25	9	
A1212A	1225	40	8	0.4	3.3	12.55	62.5	9	
A1213A	1355	40	8	0.4	MON	12.55	58.	9	
A1215A	1515	40	8	0.6	3.3	12.55	46.75	9	
A1218A	1830	40	8	0.6	MON	12.55	40.	9	CM9 ALMOST BURIED
A1217A	1745	40	8	0.8	3.3	12.55	28.	9	SPAN SET TO 91% EARLY IN RUN
A1307A	727	9	ZEROS FOR CAL (10 FT)						
A1307B	758	40	3	0.2	3.3	12.55	109.	9	
A1309A	900	40	3	0.2	MON	12.55	76.5	9	
A1310A	1005	40	3	0.4	3.3	12.55	86.	9	
A1311A	1122	40	3	0.4	MON	12.55	35.25	9	

**Table A1**  
**SUPERTANK Test Series**

Run	Time	Dur min	T, sec	H <sub>m</sub> m	r	Elev ft	Pos in.	Ref Sta	Comments
A1312A	1236	9	ZEROS FOR CAL (10 FT)						
A1313A	1315	40	3	0.6	3.3	12.55	48.	9	
A1314A	1430	40	3	0.6	MON	11.19	72.	9	1430-1435
							0.	9	1437-1443
							72.	8	1444-1450
							0.	8	1453-1500
							72.	7	1503-1510
A1315A	1550	40	3	0.8	3.3	12.53	77.5	9	
A1317A	1700	40	3	0.8	MON	11.15	72.	9	1700-1705
							0.	9	1708-1714
							111.75	8	1717-1723
							117.	7	1726-1731
							57.	9	1734-END
ST_30: EQUILIBRIUM ACCRETION (RANDOM)									
A1407A	706	9	ZEROS FOR CAL (10 FT)						
AUG 14	730	INITIAL PROFILE							
A1408A	810	20	8	0.4	3.3	12.59	84.75	9	
A1409A	918	20	8	0.4	3.3	11.17	52.5	9	
A1410A	1020	20	8	0.4	3.3	11.17	105.25	8	
A1411A	1120	70	8	0.4	3.3	11.17	102.5	8	
A1413A	1328	9	ZEROS FOR CAL (10 FT)						
A1413B	1358	70	8	0.4	3.3	11.17	83.5	8	
A1415A	1540	20	8	0.5	3.3	12.62	85.25	9	CM6 AND CM8 DISCONNECTED
A1416A	1625	40	8	0.5	3.3	12.62	64.75	9	CM5 DISCONNECTED
A1417A	1725	70	8	0.5	3.3	12.62	68.25	9	OBS UNPLUGGED AT 1818
MOVED CM4 UP 6", MOVED CM8 UP 6", DISCONNECTED CM6 AND CM 10									
A1507A	714	9	ZEROS FOR CAL (10 FT)						
AUG 15	730	INITIAL SURVEY							
A1507B	750	20	9	0.4	20	12.62	82.5	9	
A1508A	845	40	9	0.4	20	12.62	78.75	9	
A1510A	1000	70	9	0.4	20	12.62	52.	9	

**Table A1**  
**SUPERTANK Test Series**

Run	Time	Dur min	T <sub>p</sub> sec	H <sub>mo</sub> m	r	Elev ft	Pos in.	Ref Sta	Comments
A1511A	1135	70	9	0.4	20	12.62	74.5	9	
A1513A		9	ZEROS FOR CAL (10 FT)						
A1513B	1330	70	9	0.4	20	11.48	60.	8	
A1515A	1510	40	9	0.5	20	12.19	52.	9	W.L. @ 9.5 FT
A1516A	1615	70	9	0.5	20	12.19	54.25	9	W.L. @ 9.5 FT
A1518A	1805	9	ZEROS FOR CAL (9.5 FT)						
A1607A	703	9	ZEROS FOR CAL (10 FT)						
A1607B	740	40	6	0.4	3.3	12.19	51.75	9	
A1608A	855	40	7	0.5	3.3	11.65	4.5	8	
A1610A	1000	40	7	0.4	3.3	11.65	7.5	8	
A1611A	1120	40	10	0.4	3.3	11.65	5.25	8	
A1612A	1226	9	ZEROS FOR CAL (10 FT)						
A1613A	1300	40	6	0.4	MON	11.65	5.5	8	
A1614A	1420	40	7	0.5	MON	11.65	76.5	7	
A1615A	1530	40	7	0.4	MON	11.65	73.	7	
A1616A	1635	40	10	0.4	MON	11.65	77.75	7	
A1617A	1744	CALIBRATION FOR WAVE GAGES							
ST_40: DEDICATED HYDRODYNAMICS									
AUG 19	730	INITIAL SURVEY							
A1909A	911	9	ZEROS FOR CAL (10 FT)						
A1909B	940	20	3	0.4	3.3	11.65	75.	8	
		20		0.8					
		20		0.4					
A1911A	1100	10	3	0.4	MON	11.65	52.75	8	DATA LOST
		10		0.8					
		10		0.8					
A1911B	1155	20	5	0.4	3.3	11.65	108.	8	
		20		0.8					
		20		0.4					
A1914A	1400	10	5	0.4	MON	11.65	129.	8	
		10		0.8					
		10		0.4					

**Table A1**  
**SUPERTANK Test Series**

Run	Time	Dur min	$T_p$ sec	$H_{pm}$ m	$\gamma$	Elev ft	Pos in.	Ref Sta	Comments
A1916A	1628	10	5	0.2	MON	11.65	3.75	9	
		10		0.4					
		10		0.5					
		10		0.6					
		10		0.7					
		10		0.8					
		10		0.2					
A2007A	711	9	ZEROS FOR CAL (10 FT)						
A2007B	735	40	5	0.7	100	12.14	122.	7	
A2008A	857	40	5	0.7	20	12.2	126.25	7	
A2010A	1010	40	5	0.7	3.3	11.42	65.	8	SYSTEM CRASH -- HY DATA LOST
A2013A	1332	40	5/8	0.7	20	11.42	88.125	9	WRONG INPUT
	5.0 s	1.64 ft			20	$\sigma = .09$			
	8.0 s	1.64 ft			20	$\sigma = .07$			
A2014A	1440	40	5	0.7	1.0	11.42	79.	8	
A2015A	1545	40	5/8	0.5	20	11.42	74.5	7	REPEATED A2013A
	5.0 s	1.64 ft			20	$\sigma = .09$			
	8.0 s	1.64 ft			20	$\sigma = .07$			
A2017A	1735	40	8	0.5	20	11.42	75.5	7	$\sigma_s = 0.07$
A2018A	1835	40	5	0.5	20	11.42	32.75	8	REPEAT A2013A W/ COR- RECT INPUT
A2107A	724	9	ZEROS FOR CAL (10 FT)						
A2107B	745	40	5/8	0.7	100	11.42	101.	8	
	5.0 s	1.64 ft			100	$\sigma = .09$			
	8.0 s	1.64 ft			100	$\sigma = .07$			
A2108A	850	40	5/8	0.7	20	11.42	98.	8	
	5.0 s	1.97 ft			20	$\sigma = .09$			

**Table A1**  
**SUPERTANK Test Series**

Run	Time	Dur min	T <sub>p</sub> sec	H <sub>m</sub> m	γ	Elev ft	Pos in.	Ref Sta	Comments
	8.0 s	1.15 ft			20	σ=.07			
A2109A	955	40	3/7	0.7	20	11.42	47.5	9	
	3.0 s	1.97 ft			20	σ=.09			
	7.0 s	1.15 ft			20	σ=.07			
A2111A	1100	40	3/7	0.4	20	11.42	122.	8	
	3.0 s	1.10 ft			20	σ=.09			
	7.0 s	0.75 ft			20	σ=.07			
A2112A	1210	40	3/7	0.7	3.3/ 20	11.42	97.	9	
	3.0 s	1.97 ft			3.3	σ=.09			
	7.0 s	1.15 ft			20	σ=.07			
A2114A	1417	9	ZEROS FOR CAL (10 FT)						
ST_50: DUNE EROSION 1/2									
AUG 22	700	INITIALSURVEY							
A2207A	755	9	ZEROS FOR CAL (10 FT)						W.L. @ 9.5 FT
A2208A	845	10	3	0.8	3.3	11.5	6.5	9	W.L. @ 9.5 FT
A2209A	915	20	3	0.8	3.3	11.5	0.	10	W.L. @ 9.5 FT
A2209B	957	30	4.5	0.8	3.3	12.5	0.	10	W.L. @ 9.5 FT
A2210A	1055	30	6	0.8	3.3	12.5	0.	10	W.L. @ 9.5 FT
A2213A	1301	9	ZEROSFOR CAL (10.5 FT)						W.L. @ 10.5 FT
A2213B	1332	30	3	0.8	3.3	12.5	0.	10	W.L. @ 10.5 FT SPAN SET TO 90% @ 13:37
A2214A	1440	30	4.5	0.7	3.3	12.5	0.	10	W.L. @ 10.5 FT
A2215A	1545	30	6	0.7	3.3	12.5	0.	10	W.L. @ 10.5 FT SPAN SET TO 90% @ 15:52
A2216A	1640	30	3/7	0.5	3.3/ 20	12.5	0.	10	W.L. @ 10.5 FT
ST_60: DUNE EROSION 2/2									
AUG23	700	INITIAL SURVEY							

**Table A.1**  
**SUPERTANK Test Series**

Run	Time	Dir	T <sub>p</sub> sec	H <sub>ms</sub> m	γ	Elev ft	Pos in.	Ref Sta	Comments
A2307A	740	9	ZEROS FOR CAL (10.5 FT)						
A2308A	805	20	3	0.7	3.3	12.5	0.	10	W.L. @ 10.5 FT
A2308B	855	20	3	0.7	3.3	12.5	0.	10	W.L. @ 10.5 FT
A2309A	935	20	3	0.7	3.3	12.5	0.	10	W.L. @ 10.5 FT
A2310A	1020	20	4.5	0.7	3.3	12.5	0.	10	W.L. @ 10.5 FT
A2311A	1100	20	4.5	0.7	3.3	12.5	0.	10	W.L. @ 10.5 FT
A2311B	1145	20	4.5	0.7	3.3	12.5	0.	10	W.L. @ 10.5 FT
A2313A	1303	9	ZEROS FOR CAL (11 FT)						
A2313B	1345	20	6	0.5	3.3	12.5	0.	10	W.L. @ 11.0 FT
A2315A	1525	20	6	0.5	3.3	12.5	0.	10	W.L. @ 11.0 FT
A2316A	1605	20	6	0.5	3.3	12.5	0.	11	W.L. @ 11.0 FT
A2316B	CALIBRATION FOR WAVE GAGES								
24-25AUG91 SEAWALL MOVED SAND FROM SUBAQ PROFILE TO BERM AND OUT OF TANK; CHECKED EMCM POSITIONS; BROKE AND REPLACED OSU WAVE GAGES 6 AND 9									
ST_70: SEAWALL 1/3									
AUG 26	700	INITIAL SURVEY							
A2608A	800	6	ZEROS FOR CAL @ 10.5 FT (THEN DROPPED W.L. TO 9.5 FT AND DID 9-MIN CAL)						
A2609A	925	10	4.5	0.7	3.3	12.5	84.	12	W.L. @ 9.5 FT
A2610A	1000	20	4.5	0.7	3.3	12.5	84.	12	W.L. @ 9.5 FT
A2610B	1040	40	4.5	0.7	3.3	12.5	84.	14	W.L. @ 5.5 FT
A2612A	1215	9	ZEROS FOR CAL (10 FT)						
A2612B	1245	10	4.5	0.7	3.3	13	84.	14	W.L. @ 10.0 FT DATA LOST
A2613A	1321	20	4.5	0.7	3.3	13	84.	14	W.L. @ 10.0 FT
A2614A	1420	20	4.5	1	3.3	13	84.	14	FOUND CM1-4 DISCON- NECTED W.L. @ 10.0 FT
A2615A	1505	40	4.5	1	3.3	13	84.	14	CM1-4 OPERATING W.L. @ 10.0 FT
A2617A	1722	9	ZEROS FOR CAL (11 FT)						
A2617B	1745	10	4.5	0.8	3.3	14	84.	14	W.L. @ 11.0 FT
A2618A	1820	20	4.5	0.7	3.3	14	84.	14	W.L. @ 11.0 FT
A2618B	1855	20	4.5	0.7	3.3	14	84.	14	W.L. @ 11.0 FT
ST 80: SEAWALL 2/3									



Table A1

## SUPERTANK Test Series

Run	Time	Dur min	T, sec	H <sub>m</sub> m	γ	Elev ft	Pos in.	Ref Sta	Comments
AUG 27	700	INITIAL SURVEY							
A2707A	756	9	ZEROS FOR CAL (11 FT)						
A2708A	820	10	4.5	0.7	3.3	14	84.	14	W.L. @ 11.0 FT
A2708B	845	20	4.5	0.7	3.3	14	84.	14	W.L. @ 11.0 FT
A2709A	925	70	4.5	0.7	3.3	14	84.	14	W.L. @ 11.0 FT
A2710A	1055	20	4.5	0.7	MON	14	84.	14	W.L. @ 11.0 FT
A2711A	1145	40	4.5	0.7	MON	14	84.	14	W.L. @ 11.0 FT
AUG 27		LOWERED WATER LEVEL AND SHOVELED SURF ZONE SAND LANDWARD FROM BAR TO FORESHORE; FILLED TANK							
ST_90: BERM FLOODING 1/2									
AUG 28	700	INITIAL SURVEY							
A2809A	916	9	ZEROS FOR CAL (11 FT)						
A2809B	930	10	3	0.7	3.3	14	84.	9	W.L. @ 11.0 FT
A2810A	1025	20	3	0.7	3.3	14	84.	10	CART NOT PLUGGED IN W.L. @ 11.0 FT
A2811A	1120	20	3	0.7	3.3	14	84.	10	W.L. @ 11.0 FT
ST_A0: FOREDUNE EROSION									
AUG 28	1500	INITIAL SURVEY							
A2816A	1611	9	ZEROS FOR CAL (11 FT)						
A2816B	1637	10	3	0.7	3.3	14	84.	10	W.L. @ 11.0 FT
ST_B0: DEDICATED SUSPENDED SEDIMENT									
A2908A	833	9	ZEROS FOR CAL (10 FT)						
A2908B	855	100 S	10	0.6	MON	13			TEST TO FIND BP
A2909A	950	150 S	10	0.6	MON	13	120.	6	270 SEC RECORD
A2910A	1025	150 S	10	0.6	MON	13	48.	6	270 SEC RECORD
A2910B	1050	150 S	10	0.6	MON	13	72.	5	270 SEC RECORD
A2911A	1110	120 S	8.0	0.6	MON	13	72.	5	240 SEC RECORD
A2911B	1135	120 S	8.0	0.6	MON	13	0.	7	240 SEC RECORD
A2912A	1200	90 S	6.0	0.6	MON	13	17.5	7	210 SEC RECORD
A2912B	1231	90 S	6.0	0.6	MON	13	96.	6	210 SEC RECORD
A2912C	1255	90 S	6.0	0.6	MON	13	0.	6	210 SEC RECORD
A2915A	1505	67.5 S	4.5	0.6	MON	13	57.	7	187.5 SEC RECORD
A2: 15B	1530	67.5 S	4.5	0.6	MON	13	96.	6	187.5 SEC RECORD

**Table A1**  
**SUPERTANK Test Series**

Run	Time	Dur min	$T_p$ sec	$H_m$ m	$\gamma$	Elev ft	Pos In.	Ref Sta	Comments
A2915C	1549	60 S	3.0	0.6	MON	13	96.	6	180 SEC RECORD
A2916A	1618	120 S	8.0	0.8	MON	13	96.	6	240 SEC REC (90% SPAN)
A2916B	1638	120 S	8.0	0.7	MON	13	7.	8	240 SEC RECORD
A2917A	1720	90 S	6.0	0.8	MON	13	7.	8	210 SEC RECORD
A2917B	1746	90 S	6.0	0.8	MON	13	52.5	7	210 SEC RECORD
A2918A	1818	67.5 S	4.5	1.0	MON	13	26.25	8	187.5 SEC RECORD
A3007A	737	9	ZEROS FOR CAL (10 FT)						
A3009A	900	20	8.0	0.4	3.3	13	122.5	7	TO SMOOTH PROFILE
A3010A	1025	120 S	8.0	0.4	MON	13	26.	6	240 SEC RECORD
A3010B	1055	120 S	8.0	0.4	MON	13	72.	5	240 SEC RECORD
A3011A	1110	90 S	6.0	0.4	MC	13	72.	5	210 SEC RECORD
A3011B	1127	67.5 S	4.5	0.4	MON	13	72.	5	187.5 SEC REC.
A3011C	1156	67.5 S	4.5	0.8	MON	13	33.	7	187.5 SEC REC.
A3012A	1220	67.5 S	4.5	0.8	MON	13	132.5	7	187.5 SEC REC.
A3012B	1400	45 S	3.0	1	MON	13	84.5	8	165 SEC REC.
A3017A	1717	—	8.0	0.4	MON	13	20.	17	ABORTED
A3017B	1727	40	8.0	0.4	MON	13	20.	17	RIPPLE MEAS. RUN
S0109A	925	9	ZEROS FOR CAL (10 FT)						
S0109B	945	20	8.0	0.4	3.3	13.5	84.	14	TO SMOOTH PROFILE
ST_CO: SEAWALL 3/3									
SEP 02	700	INITIAL SURVEY							
S0209A	932	9	ZEROS FOR CAL (9 FT)						
S0209B	955	10	3.0	0.8	3.3	13.5	84.	14	NO HYDRAULIC PRESURE FOR HALF OF RUN; LOW WAVES 1ST 1/2 OF RUN W.L. @ 9.0 FT
S0210A	1052	20	3.0	0.8	3.3	13.5	84.	14	WAVE GAGE STA 17 MALFUNCTIONING W.L. @ 9.0 FT
S0211A	1147	40	3.0	0.8	3.3	13.5	84.	14	W.L. @ 9.0 FT
S0213A	1350	9	ZEROS FOR CAL (10 FT)						
S0214A	1410	20	3.0	0.8	3.3	13.5	84.	14	LANDWARD 8 EMCM FOUND UNPLUGGED; RESUMED OPERATION W.L. @ 9.0 FT

**Table A1**  
**SUPERTANK Test Series**

Run	Time	Dur min	T <sub>p</sub> sec	H <sub>m</sub> m	γ	Elev ft	Pos in.	Ref Sta	Comments
S0214B	1455	40	3.0	0.8	3.3	13.5	87.5	14	
S0216A	1605	40	3.0	0.4	3.3	13.5	86.5	14	
S0217A	1735	40	8.0	0.4	3.3	13.5	86.75	14	
S0218A	1842	40	8.0	0.7	3.3	13.5	86.75	14	RUN ABORTED AT 1918; WAVE BOARD LOCKED; REMOVED SEAWALL
S0220A	2000	9	ZEROS FOR CAL (10 FT)						
ST_D0: BERM FLOODING 2/2									
SEP 03	700	INITIAL SURVEY							
S0308A	831	9	ZEROS FOR CAL (10 FT)						
S0309A	900	20	3.0	0.7	3.3	13.5	86.75	14	WAVE GAGE ON CARRIAGE OFF FOR FIRST 7 MIN OF RUN
S0310A	1005	20	3.0	0.7	3.3	13.5	86.5	14	
S0311A	1105	20	3.0	0.7	20	13.5	86.25	14	
S0311B	1150	20	3.0	0.7	MON	13.5	86.5	14	
ST_E0: LDV 1/2									
SEP 03	1300	INITIAL SURVEY							
S0314A	1412	9	ZEROS FOR CAL (9 FT)						
S0314B	1430	40	3.0	0.2	MON	13.5	100.75	18	
S0315A	1530	40	3.0	0.6	MON	13.5	100.75	18	
S0316A	1630	40	3.0	0.8	MON	13.5	100.75	18	
ST_F0: LDV 2/2									
SEP 04	700	INITIAL SURVEY							
S0409A	930	9	ZEROS FOR CAL (9 FT)						
S0409B	955	40	8.0	0.7	MON	15.8	101.5	18	SPAN = 0.98 W.L. @ 9.0 FT
S0410A	1055	40	8.0	0.4	MON	15.8	101.5	18	W.L. @ 9.0 FT
S0411A	1155	40	8.0	0.2	MON	15.8	101.5	18	W.L. @ 9.0 FT
ST_G0: EQUILIBRIUM EROSION (MONOCHROMATIC)									
S0413A	1348	9	ZEROS FOR CAL (10 FT)						
S0414A	1410	20	3.0	0.8	MON	12.3	37.	9	
S0415A	1500	40	3.0	0.8	MON	12.3	26.5	9	
S0416A	1615	70	3.0	0.8	MON	12.3	137.	8	

**Table A1**  
**SUPERTANK Test Series**

Run	Time	Dur min	T, sec	H <sub>m</sub> m	γ	Elev ft	Pos in.	Ref Sta	Comments
S0417A	1744	10	3.0	0.8	MON	12.3	125.	8	70 MIN ABORTED
S0418A	1820	70	3.0	0.8	MON	12.3	130.	8	
ST_H0: EQUILIBRIUM EROSION/TRANSITION (MONOCHROMATIC)									
S0507A	752	9	ZEROS FOR CAL (10 FT)						
S0508A	825	70	3.0	0.8	MON	12.3	140.	8	
S0510A	1006	40	4.5	0.7	MON	12.3	136.5	8	
S0511A	1110	40	4.5	0.6	MON	12.3	136.	8	
S0512A	1210	40	4.5	0.5	MON	12.3	13.5	9	
ST_I0: EQUILIBRIUM ACCRETION (MONOCHROMATIC)									
S0513A	1335	20	8.0	0.5	MON	12.3	11.5	9	
S0514A	1425	20	8.0	0.5	MON	12.3	105.25	8	
S0515A	1515	40	8.0	0.5	MON	12.3	138.5	8	
S0516A	1625	70	8.0	0.5	MON	12.3	136.	8	
S0517A	1755	70	8.0	0.5	MON	12.3	132.	8	
S0607A	712	9	ZEROS FOR CAL (10.0 FT)						
S0607B	755	70	8.0	0.5	MON	12.3	13.5	9	
S0609A	930	70	8.0	0.5	MON	12.3	86.5	9	
S0610A	1055	70	8.0	0.5	MON	12.3	90.	9	
S0612A	1225	70	8.0	0.5	MON	12.3	84.	9	
S0614A	1405	70	8.0	0.5	MON	12.3	67.	9	
SEP 06	1600	PRESURVEY FOR 1635 RUN							
S0616A	1635	40	8.0	0.5	MON	12.3	85.5	9	PLANED OFF FORESHORE SCARP & LANDWARD; RISING TIDE; ENDED @ 10.6 FT
S0617A	1725	9	ZEROS FOR CAL (10.6 FT)						
ST_J0: NARROW-CRESTED MOUND									
S0908A	852	60	ZEROS FOR CAL (10 FT)						
SEP 09	1100	INITIAL SURVEY							
S0912A	1213	9	ZEROS FOR CAL (10 FT)						
S0913A	1330	20	3.0	0.7	3.3	12.3			
S0914A	1420	20	3.0	0.7	3.3	12.3			
S0915A	1510	40	3.0	0.7	3.3	12.3			

**Table A1**  
**SUPERTANK Test Series**

Run	Time	Dur min	$T_p$ sec	$H_m$ m	$r$	Elev ft	Pos in.	Ref Sta	Comments
S0918A	1610	70	3.0	0.7	3.3	12.3			
SEP 09	1700	RESHAPE MOUND							
S0918A	1810	70	3.0	0.7	3.3	12.3	122.5	13	
S1007A	737	9	ZEROS FOR CAL (10 FT)						
S1008A	800	20	8.0	0.5	3.3	12.3	124.5	13	
S1008B	840	40	8.0	0.5	3.3	12.3	121.	13	
S1009A	940	70	8.0	0.5	3.3	12.3	116.5	13	
S1011A	1105	70	8.0	0.5	3.3	12.3	126.	13	
S1013A	1315	70	8.0	0.5	3.3	12.3	116.5	13	
S1014A	1445	20	3.0	0.7	MON	12.3	146.75	13	
S1015A	1520	20	3.0	0.7	MON	12.3	126.	13	
S1015B	1555	40	3.0	0.7	MON	12.3	116.	13	
S1016A	1659	70	3.0	0.7	MON	12.3	111.25	13	DATA LOST
S1018A	1832	40	3.0	0.7	MON	12.3	101.	13	
SEP 11	700	SCARP REMOVED							
S1107A	720	9	ZEROS FOR CAL (10 FT)						
S1107B	740	20	8.0	0.5	MON	12.3	126.5	13	
S1108A	815	40	8.0	0.5	MON	12.3	124.25	13	
S1109A	925	70	8.0	0.5	MON	12.3	117.25	13	
S1111A	1100	70	8.0	0.5	MON	12.3	126.5	13	ACTUAL RUN - 60 MIN
ST_K0: BROAD-CRESTED MOUND									
SEP 12	700	INITIAL SURVEY							
S1208A	805	9	ZEROS FOR CAL (10 FT)						
S1208B	825	20	3.0	0.7	3.3	12.3	3.75	15	
S1209A	910	20	3.0	0.7	3.3	12.3	5.5	15	
S1209B	950	40	3.0	0.7	3.3	12.3	4.5	15	
S1210A	1050	70	3.0	0.7	3.3	12.3	141.	14	
S1212A	1220	70	3.0	0.7	3.3	12.3	125.75	14	
S1214A	1420	20	8.0	0.5	3.3	12.3	130.75	14	
S1215A	1505	40	8.0	0.5	3.3	12.3	138.	14	CHAN 35-42 UNPLUGGED PART OF RUN
S1216A	1605	70	8.0	0.5	3.3	12.3	138.5	14	
S1217A	1730	70	8.0	0.5	3.3	12.3	5.	15	

**Table A1**  
**SUPERTANK Test Series**

Run	Time	Dur min	$T_p$ sec	$H_{ms}$ m	$r$	Elev ft	Pos in.	Ref Sta	Comments
S1307A	714	9	ZEROS FOR CAL (10 FT)						
S1307B	735	20	3.0	0.7	MON	12.3	6.25	15	STA 13 W.G. BAD
S1308A	815	20	3.0	0.7	MON	12.3	6.5	15	
S1309A	905	40	3.0	0.7	MON	12.3	6.25	15	STA 13 W.G. OKAY
S1310A	1003	70	3.0	0.7	MON	12.3	7.5	15	
S1311A	1138	40	3.0	0.7	MON	12.3	8.	15	
S1313A	1313	20	8.0	0.5	MON	12.3	8.75	15	
S1314A	1405	40	8.0	0.5	MON	12.3	6.75	15	
S1315A	1505	70	8.0	0.5	MON	12.3	7.	15	
S1316A	1644	70	8.0	0.5	MON	12.3	4.5	15	
A1318A	1810	9	ZERO FOR CAL (10 FT)						
A1318B	1830	CALIBRATION FOR WAVE GAGES							

**Table A2**  
**SUPERTANK Current Meter Location: Survey 1 (08/04/91, 17:30)**

Instrument	Location			Comments
	x, ft	y, ft	z, ft	
CM18	72.82	10.07	-5.77	
CM17	72.82	10.07	-7.32	
CM4	84.85	10.07	-5.71	
CM2	84.85	10.07	-6.76	
CM1	84.85	10.07	-8.25	
CM8	96.79	10.07	-5.77	
CM7	96.79	10.07	-6.77	
CM6	96.79	10.07	-7.77	
CM5	96.79	10.07	-8.77	
CM12	132.87	10.07	-5.70	
CM11	132.87	10.07	-6.70	
CM10	132.87	10.07	-8.23	
CM9	132.87	10.07	-9.73	
CM13	see Table A1	9.05	see Table A1	Wing
CM14	see Table A1	9.05	see Table A1	Wing
CM15	see Table A1	9.05	see Table A1	Wing
CM16	see Table A1	9.05	see Table A1	Wing
CM3	216.77	9.77		
<b>Instrument Adjustments</b>				
CM17	72.82	10.07	-6.82	Prior to A0515A
CM1	84.85	10.07	-7.75	Prior to A0608A
CM4	84.85	10.07	-6.21	Prior to A0617A
CM18	72.82	10.07	-6.27	Prior to A0617A
CM18	72.82	10.07	-5.77	Prior to A0709A
CM4	84.85	10.07	-5.71	Prior to A0709A
CM1	84.85	10.07	-7.25	Prior to A0709A
CM2	84.85	10.07	-6.26	Prior to A0709A
CM5	96.79	10.07	-8.27	Prior to A0709A
CM6	96.79	10.07	-7.27	Prior to A0709A
CM5	96.79	10.07	-7.77	Prior to A0808a
CM1	84.85	10.07	-6.75	Prior to A0907A

**Table A3**  
**SUPERTANK Current Meter Location: Survey 2 (08/10/91, 19:00)**

Instrument	Location			Comments
	x, ft	y, ft	z, ft	
CM3	38.96	9.80	-5.00	Prior to A1208A
CM1	48.96	9.83	-6.02	
CM4	60.86	10.07	-5.78	
CM2	60.86	10.07	-6.30	
CM8	73.26	10.08	-5.28	
CM7	73.26	10.08	-5.75	
CM6	73.26	10.08	-6.25	
CM5	73.26	10.08	-6.78	
CM12	84.92	10.10	-5.30	
CM11	84.92	10.10	-6.28	
CM10	84.92	10.10	-6.78	
CM9	84.92	10.10	-7.27	
CM17	132.41	9.77	-9.71	
CM18	144.18	9.77	-10.27	
Instrument Adjustments				
CM4	60.86	10.07	-5.28	Prior to A1507A
CM8	73.26	10.08	-4.78	Prior to A1507A



**Table A4**  
**SUPERTANK Current Meter Location: Survey 3 (08/17/91, 13:50)**

Instrument	Location			Comments
	x, ft	y, ft	z, ft	
CM3	36.89	9.82	-5.03	Prior to A1909A
CM1	49.01	9.83	-6.06	
CM4	60.92	10.08	-5.31	
CM2	60.92	10.08	-6.32	
CM8	72.88	10.08	-5.30	
CM7	72.88	10.08	-6.31	
CM6	84.93	10.08	-5.31	
CM5	84.93	10.08	-6.58	
CM12	96.94	10.09	-4.77	
CM11	96.94	10.09	-5.73	
CM10	96.94	10.09	-6.77	
CM9	96.94	10.09	-7.27	

**Table A5**  
**SUPERTANK Current Meter Location: Survey 4 (09/01/91, 11:00)**

Instrument	Location			Comments
	x, ft	y, ft	z, ft	
CM1	49.17	9.77	-5.08	Prior to S0109A
CM4	61.04	10.07	-5.28	
CM2	61.04	10.07	-6.30	
CM8	73.00	10.07	-6.28	
CM7	73.00	10.07	-7.26	
CM6	84.93	10.07	-5.26	
CM5	84.93	10.07	-6.73	
CM12	97.04	10.07	-5.77	
CM11	97.04	10.07	-6.75	
CM10	97.04	10.07	-7.75	
CM9	97.04	10.07	-8.24	
Instrument Adjustments				
CM3	49.17	9.77	-6.08	After S0211A

Table A6 SUPERTANK Current Meter Location: Survey 5 (09/08/91, 18:20)				
Instrument	Location			Comments
	x, ft	y, ft	z, ft	
CM6	169.03	9.80	-9.96	Prior to S0908A
CM5	169.03	9.80	-10.97	
CM8	145.08	10.07	-4.83	
CM7	145.08	10.07	-6.28	
CM4	133.01	10.07	-4.73	
CM3	133.01	10.07	-6.25	
CM1	133.01	10.07	-7.22	
CM2	133.01	10.07	-8.27	
CM12	97.01	10.08	-4.76	
CM11	97.01	10.08	-6.30	
CM10	97.01	10.08	-7.23	
CM9	97.01	10.08	-8.23	

Table A7 SUPERTANK Current Meter Location: Survey 6 (09/11/91, 18:00)				
Instrument	Location			Comments
	x, ft	y, ft	z, ft	
CM6	180.92	9.80	-10.06	Prior to S1208A
CM5	180.92	9.80	-10.92	
CM4	109.03	10.07	-4.79	
CM3	109.03	10.07	-6.24	
CM1	109.03	10.07	-7.26	
CM2	109.03	10.07	-8.23	
CM8	144.99	10.07	-4.81	
CM7	144.99	10.07	-6.32	
CM12	97.01	10.08	-4.76	
CM11	97.01	10.08	-6.30	
CM10	97.01	10.08	-7.23	
CM9	97.01	10.08	-8.23	

**Table A8**  
**SUPERTANK Wave Gage Calibration (ft/volt)**

Channel No.	Date							
	08/02*	08/03	08/04	08/05	08/06	08/07	08/08	08/09*
1	0.2984	0.2990	0.2996	0.3002	0.3007	0.3013	0.3019	0.3025
2	0.3169	0.3179	0.3189	0.3199	0.3209	0.3219	0.3229	0.3239
3	0.3210	0.3216	0.3221	0.3227	0.3233	0.3239	0.3244	0.3250
4	0.3035	0.3042	0.3049	0.3056	0.3064	0.3071	0.3078	0.3085
5	0.3355	0.3378	0.3400	0.3423	0.3445	0.3468	0.3490	0.3513
6	0.3795	0.3805	0.3815	0.3825	0.3836	0.3846	0.3856	0.3866
7	0.3539	0.3550	0.3560	0.3571	0.3581	0.3592	0.3602	0.3613
8	0.3788	0.3809	0.3831	0.3852	0.3874	0.3895	0.3917	0.3938
9	0.3881	0.3873	0.3866	0.3858	0.3851	0.3843	0.3836	0.3828
10	0.3827	0.3822	0.3818	0.3813	0.3808	0.3803	0.3799	0.3794
11	0.3801	0.3798	0.3795	0.3792	0.3789	0.3786	0.3783	0.3780
12	0.3628	0.3628	0.3627	0.3627	0.3627	0.3627	0.3626	0.3626
13	0.3892	0.3891	0.3891	0.3890	0.3890	0.3889	0.3889	0.3888
14	0.3811	0.3806	0.3800	0.3795	0.3789	0.3784	0.3778	0.3773
15	0.3557	0.3568	0.3579	0.3590	0.3602	0.3613	0.3624	0.3635
16	0.3798	0.3799	0.3800	0.3801	0.3801	0.3802	0.3803	0.3804

\* actual calibration date

**Table A9**  
**SUPERTANK Wave Gage Calibration (ft/volt)**

Channel No.	Date							
	08/10	08/11	08/12	08/13	08/14	08/15	08/16	08/17
1	0.3004	0.2983	0.2962	0.2940	0.2919	0.2898	0.2877	0.2888
2	0.3221	0.3204	0.3186	0.3168	0.3150	0.3133	0.3115	0.3122
3	0.3225	0.3200	0.3175	0.3149	0.3124	0.3099	0.3074	0.3076
4	0.3062	0.3040	0.3017	0.2994	0.2971	0.2949	0.2926	0.2927
5	0.3483	0.3453	0.3423	0.3392	0.3362	0.3332	0.3302	0.3309
6	0.3850	0.3834	0.3818	0.3801	0.3785	0.3769	0.3753	0.3738
7	0.3592	0.3571	0.3550	0.3529	0.3508	0.3487	0.3466	0.3467
8	0.3915	0.3892	0.3869	0.3845	0.3822	0.3799	0.3776	0.3769
9	0.3812	0.3795	0.3779	0.3763	0.3747	0.3730	0.3714	0.3699
10	0.3782	0.3770	0.3758	0.3747	0.3735	0.3723	0.3711	0.3692
11	0.3782	0.3783	0.3785	0.3787	0.3789	0.3790	0.3792	0.3773
12	0.3628	0.3631	0.3633	0.3635	0.3637	0.3640	0.3642	0.3642
13	0.3894	0.3901	0.3907	0.3913	0.3919	0.3926	0.3932	0.3910
14	0.3772	0.3770	0.3769	0.3768	0.3767	0.3765	0.3764	0.3760
15	0.3635	0.3636	0.3636	0.3637	0.3637	0.3638	0.3638	0.3613
16	0.3803	0.3803	0.3802	0.3802	0.3801	0.3801	0.3800	0.3844

\* actual calibration date

**Table A10**  
**SUPERTANK Wave Gage Calibration (ft/volt)**

Channel No.	Date							
	08/18	08/19	08/20	08/21	08/22	08/23*	08/24	08/25
1	0.2898	0.2909	0.2919	0.2930	0.2940	0.2951	0.2922	0.2892
2	0.3129	0.3136	0.3142	0.3149	0.3156	0.3163	0.3139	0.3116
3	0.3079	0.3081	0.3084	0.3086	0.3089	0.3091	0.3080	0.3069
4	0.2928	0.2929	0.2931	0.2932	0.2933	0.2934	0.2946	0.2957
5	0.3316	0.3323	0.3329	0.3336	0.3343	0.3350	0.3342	0.3335
6	0.3723	0.3708	0.3693	0.3678	0.3663	0.3648	0.3676	0.3705
7	0.3469	0.3470	0.3472	0.3473	0.3475	0.3476	0.3485	0.3495
8	0.3763	0.3756	0.3749	0.3742	0.3736	0.3729	0.3773	0.3818
9	0.3685	0.3670	0.3655	0.3640	0.3626	0.3611	0.3653	0.3696
10	0.3673	0.3654	0.3635	0.3616	0.3597	0.3578	0.3599	0.3621
11	0.3753	0.3734	0.3715	0.3696	0.3676	0.3657	0.3685	0.3714
12	0.3643	0.3643	0.3644	0.3644	0.3645	0.3645	0.3674	0.3704
13	0.3889	0.3867	0.3846	0.3824	0.3803	0.3781	0.3800	0.3819
14	0.3756	0.3752	0.3749	0.3745	0.3741	0.3737	0.3739	0.3741
15	0.3588	0.3563	0.3539	0.3514	0.3489	0.3464	0.3487	0.3509
16	0.3887	0.3931	0.3974	0.4018	0.4061	0.4105	0.4165	0.4226

\* actual calibration date

**Table A11**  
**SUPERTANK Wave Gage Calibration (ft/volt)**

Channel No.	Date							
	08/26*	08/27	08/28	08/29	08/30	08/31	09/01	09/02
1	0.2863	0.2895	0.2927	0.2959	0.2991	0.3023	0.3055	0.3087
2	0.3092	0.3124	0.3156	0.3187	0.3219	0.3251	0.3283	0.3314
3	0.3058	0.3084	0.3110	0.3136	0.3162	0.3189	0.3215	0.3241
4	0.2969	0.2987	0.3006	0.3024	0.3042	0.3061	0.3079	0.3097
5	0.3327	0.3329	0.3331	0.3333	0.3335	0.3337	0.3339	0.3341
6	0.3733	0.3769	0.3806	0.3842	0.3879	0.3915	0.3952	0.3988
7	0.3504	0.3522	0.3540	0.3558	0.3576	0.3595	0.3613	0.3631
8	0.3862	0.3913	0.3964	0.4015	0.4066	0.4118	0.4169	0.4220
9	0.3732	0.3760	0.3782	0.3804	0.3826	0.3849	0.3871	0.3893
10	0.3642	0.3672	0.3702	0.3732	0.3762	0.3792	0.3822	0.3852
11	0.3742	0.3767	0.3793	0.3818	0.3843	0.3869	0.3894	0.3919
12	0.3733	0.3747	0.3760	0.3774	0.3787	0.3801	0.3814	0.3828
13	0.3838	0.3868	0.3899	0.3929	0.3959	0.3990	0.4020	0.4050
14	0.3743	0.3780	0.3816	0.3853	0.3889	0.3926	0.3962	0.3999
15	0.3532	0.3560	0.3588	0.3616	0.3644	0.3673	0.3701	0.3729
16	0.4286	0.4258	0.4230	0.4203	0.4175	0.4147	0.4118	0.4092

\* actual calibration date

**Table A12**  
**SUPERTANK Wave Gage Calibration (ft/volt)**

Channel No.	Date							
	09/03	09/04*	09/05	09/06	09/07	09/08	09/09*	09/10
1	0.3119	0.3151	0.3151	0.3151	0.3151	0.3151	0.2986	0.2986
2	0.3346	0.3378	0.3378	0.3378	0.3378	0.3378	0.3233	0.3233
3	0.3367	0.3293	0.3293	0.3293	0.3293	0.3293	0.3204	0.3204
4	0.3116	0.3134	0.3134	0.3134	0.3134	0.3134	0.3046	0.3046
5	0.3343	0.3345	0.3345	0.3345	0.3345	0.3345	0.3478	0.3478
6	0.4025	0.4061	0.4061	0.4061	0.4061	0.4061	0.3975	0.3975
7	0.3649	0.3667	0.3667	0.3667	0.3667	0.3667	0.3564	0.3564
8	0.4271	0.4322	0.4322	0.4322	0.4322	0.4322	0.4865	0.4865
9	0.3915	0.3937	0.3937	0.3937	0.3937	0.3937	0.3877	0.3877
10	0.3882	0.3912	0.3912	0.3912	0.3912	0.3912	0.4074	0.4074
11	0.3945	0.3970	0.3970	0.3970	0.3970	0.3970	0.3392	0.3892
12	0.3841	0.3855	0.3855	0.3855	0.3855	0.3855	0.3753	0.3753
13	0.4081	0.4111	0.4111	0.4111	0.4111	0.4111	0.3967	0.3967
14	0.4035	0.4072	0.4072	0.4072	0.4072	0.4072	0.3905	0.3905
15	0.3757	0.3785	0.3785	0.3785	0.3785	0.3785	0.3651	0.3651
16	0.4064	0.4036	0.4036	0.4036	0.4036	0.4036	0.3889	0.3889
* actual calibration date								

**Table A13**  
**SUPERTANK Wave Gage Calibration (ft/volt)**

Channel No.	Date		
	09/11	09/12	09/13*
1	0.2986	0.3115	0.3115
2	0.3233	0.3307	0.3307
3	0.3204	0.3255	0.3255
4	0.3046	0.3136	0.3136
5	0.3478	0.3511	0.3511
6	0.3975	0.4121	0.4121
7	0.3564	0.3531	0.3531
8	0.4865	0.3771	0.3771
9	0.3877	0.3832	0.3832
10	0.4074	0.4623	0.4623
11	0.3892	0.3894	0.3894
12	0.3753	0.3759	0.3759
13	0.3967	0.4031	0.4031
14	0.3905	0.4295	0.4295
15	0.3651	0.3876	0.3876
16	0.3889	0.4180	0.4180
* actual calibration date			



**Table A14**  
**SUPERTANK Current Meter Calibration**

Current Meter	Serial Number	Axis	Channel	Pre-Cal		Post-Cal	
				Gain m/sec/volt	Offset m/sec	Gain m/sec/volt	Offset m/sec
CM1	S1150	X	27			1.053	-0.002
		Y	28			1.024	-0.045
CM2	S1084	X	29	1.013	0.011	1.008	-0.005
		Y	30	1.040	0.034	1.049	0.012
CM3	S1133	X	31/59			1.026	-0.064
		Y	32/60			1.011	-0.050
CM4	S1135	X	33			1.034	-0.005
		Y	34			1.057	0.006
CM5	S1050	X	35	0.650	0.004	0.661	-0.003
		Y	36	0.649	0.004	0.655	-0.014
CM6	S292	X	37			0.651	0.067
		Y	38			0.657	0.035
CM7	S1151	X	39			1.019	0.014
		Y	40			1.025	0.002
CM8	S837	X	41	1.230	-0.009	0.959	-0.007
		Y	42	1.084	0.000	0.958	-0.008
CM9	S1081	X	43	1.010	0.000	1.030	0.011
		Y	44	1.039	-0.016	1.162	0.122
CM10	S1080	X	45	1.093	0.010	1.052	-0.005
		Y	46	1.069	-0.006	1.049	-0.003
CM11	S1013	X	47	1.054	-0.027	1.042	-0.059
		Y	48	1.033	-0.031	1.041	-0.021
CM12	S1015	X	49	1.036	0.024	1.024	0.023
		Y	50	1.056	0.004	1.000	0.014
CM13	S765	X	51	1.177	0.034	1.175	-0.031
		Y	52	1.356	-0.091	1.356	-0.099
CM14	S892	X	53	1.283	0.019	1.293	0.022
		Y	54	1.143	-0.046	1.149	-0.044
CM15	S1083	X	55	1.018	0.008	1.036	-0.003
		Y	56	1.053	0.010	1.084	0.006
CM16	S1012	X	57	1.049	0.038	1.051	0.010
		Y	58	1.091	0.021	1.080	0.013
CM17	S1100	X	61			0.608	-0.001
		Y	62			0.617	0.034
CM18	S1101	X	63			0.619	-0.014
		Y	64			0.627	-0.001

Velocity (m/sec) = gain \* voltage + offset

# Appendix B

## Beach Profile Data

*by Nicholas C. Kraus and John M. Mason*

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### Profile Survey Plots

Pages B2-B53 of this appendix contain plots of all beach profile surveys performed along the center of the wave channel during the SUPERTANK Laboratory Data Collection Project. This survey line was designated as Line 6, meaning it was located 6 ft from the west wall of the channel. Each plot shows the initial profile survey for the run as a dashed line and the present survey as a solid line.

The name of the test is given in the upper right-hand corner of each page under the title SUPERTANK. The first plot for each run within the test contains the date the run began, time the survey was performed in Pacific Standard Time (the local time in which SUPERTANK was conducted), and the total elapsed time in minutes of wave action after the initial survey. All plots following the first plot for a given test have the time of the survey and the elapsed time in minutes of wave action corresponding to the particular survey. If a test was conducted over more than one day, a date is given to show the change in days.

Pages B54-B55 contain example profile survey data, that is, for Line 6, and for Lines 3 and 9 located 3 and 9 ft<sup>1</sup> from the west wall, respectively. Table B1 explains the format in which the profile survey data are listed. In the listings, all length units are given in feet, and elevations are given with respect to the top of the wave channel. The remainder of the profile data are given in the ASCII file PROFILES.DAT on an enclosed diskette.

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<sup>1</sup> A table of factors for converting non-SI units of measurement to SI units is presented on page vi.

910805  
9:45  
20 min

SUPERTANK  
Test ST\_10

10:45  
60 min

12:30  
130 min

15:20  
200 min

17:30  
270 min

1 m  
10 m

910806  
7:20  
270 min

SUPERTANK  
Test ST\_10

8:05  
290 min

9:45  
330 min

11:00  
400 min

13:35  
470 min

1 m  
10 m

15:58  
490 min

SUPERTANK  
Test ST\_10

17:25  
510 min

18:22  
550 min

910807  
7:45  
550 min

10:15  
570 min

1 m  
10 m

B4

Appendix B Beach Profile Data

11:20  
610 min

SUPERTANK  
Test ST\_10

13:05  
680 min

15:00  
750 min

17:00  
820 min

910808  
7:00  
830 min

1 m  
10 m

8:30  
870 min

SUPERTANK  
Test ST\_10

9:50  
940 min

12:00  
940 min

12:40  
960 min

14:25  
980 min

1 m  
10 m

15:30  
1000 min

SUPERTANK  
Test ST\_10

16:25  
1020 min

17:30  
1040 min

910809  
7:30  
1040 min

8:35  
1080 min

1 m  
10 m



10:10  
1120 min

SUPERTANK  
Test ST\_10

11:30  
1160 min

12:55  
1200 min

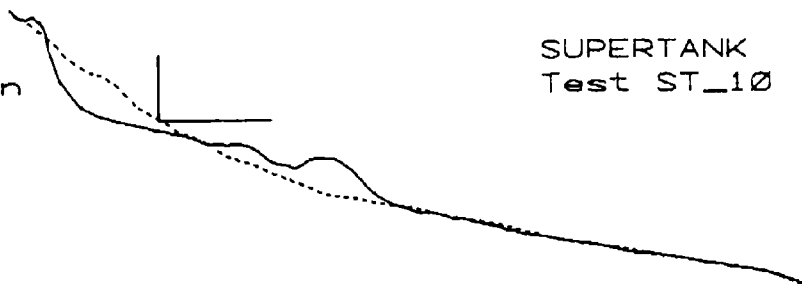
14:15  
1240 min

15:35  
1280 min

1 m  
10 m

16:55  
1285 min

SUPERTANK  
Test ST\_10



1 m  
10 m

910812  
9:10  
40 min

SUPERTANK  
Test ST\_20

11:15  
80 min

12:25  
120 min

13:35  
160 min

15:15  
200 min

1 m  
10 m

B10

Appendix B Beach Profile Data

16:30  
240 min

SUPERTANK  
Test ST\_20

17:45  
280 min

910813  
7:58  
320 min

9:00  
360 min

10:05  
400 min

1 m  
10 m

11:22  
440 min

SUPERTANK  
Test ST\_20

13:15  
480 min

14:30  
520 min

15:50  
560 min

17:00  
600 min

1 m  
10 m

17:01  
601 min

SUPERTANK  
Test ST-20

17:02  
602 min

17:03  
603 min

17:04  
604 min

17:05  
605 min

1 m  
10 m

17:06  
606 min

SUPERTANK  
Test ST\_20

17:07  
607 min

17:08  
608 min

17:09  
609 min

1 m  
10 m

910814  
8:10  
20 min

SUPERTANK  
Test ST\_30

9:18  
40 min

10:20  
60 min

11:20  
130 min

13:58  
200 min

1 m  
10 m



15:40  
220 min

SUPERTANK  
Test ST\_30

16:25  
260 min

17:25  
330 min

910815  
7:30  
330 min

7:50  
350 min

1 m  
10 m

B16

Appendix B Beach Profile Data

8:45  
390 min

SUPERTANK  
Test ST\_30

10:00  
460 min

11:35  
530 min

13:30  
600 min

15:10  
640 min

1 m  
10 m

16: 15  
710 min

SUPERTANK  
Test ST\_30

910816  
7: 40  
750 min

8: 55  
790 min

10: 00  
830 min

11: 20  
870 min

1 m  
10 m

13:00  
910 min

SUPERTANK  
Test ST\_30

14:20  
950 min

15:30  
990 min

16:35  
1030 min

1 m  
10 m

910819  
9:40  
20 min

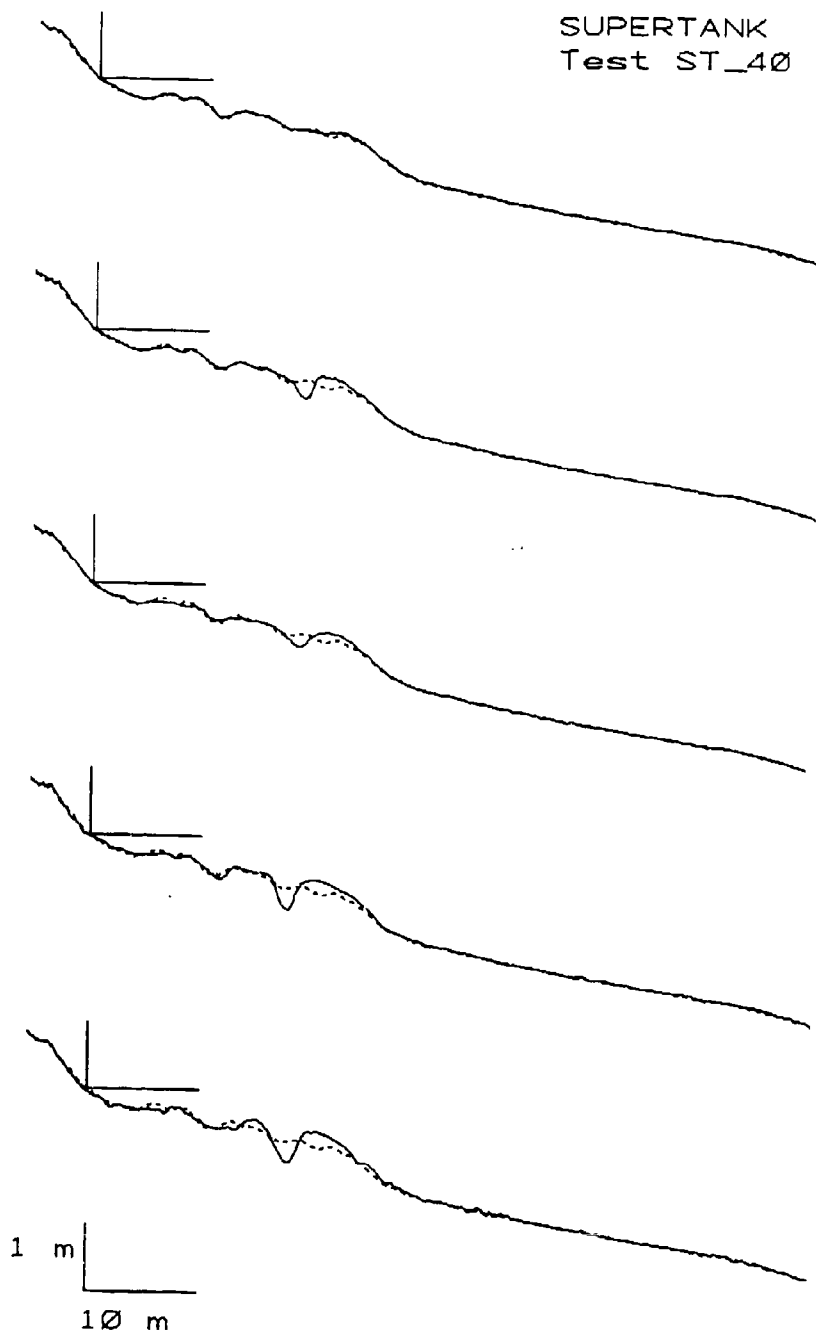
SUPERTANK  
Test ST\_40

11:00  
30 min

11:55  
50 min

14:00  
60 min

16:28  
70 min



B20

Appendix B Beach Profile Data

910820  
7: 35  
110 min

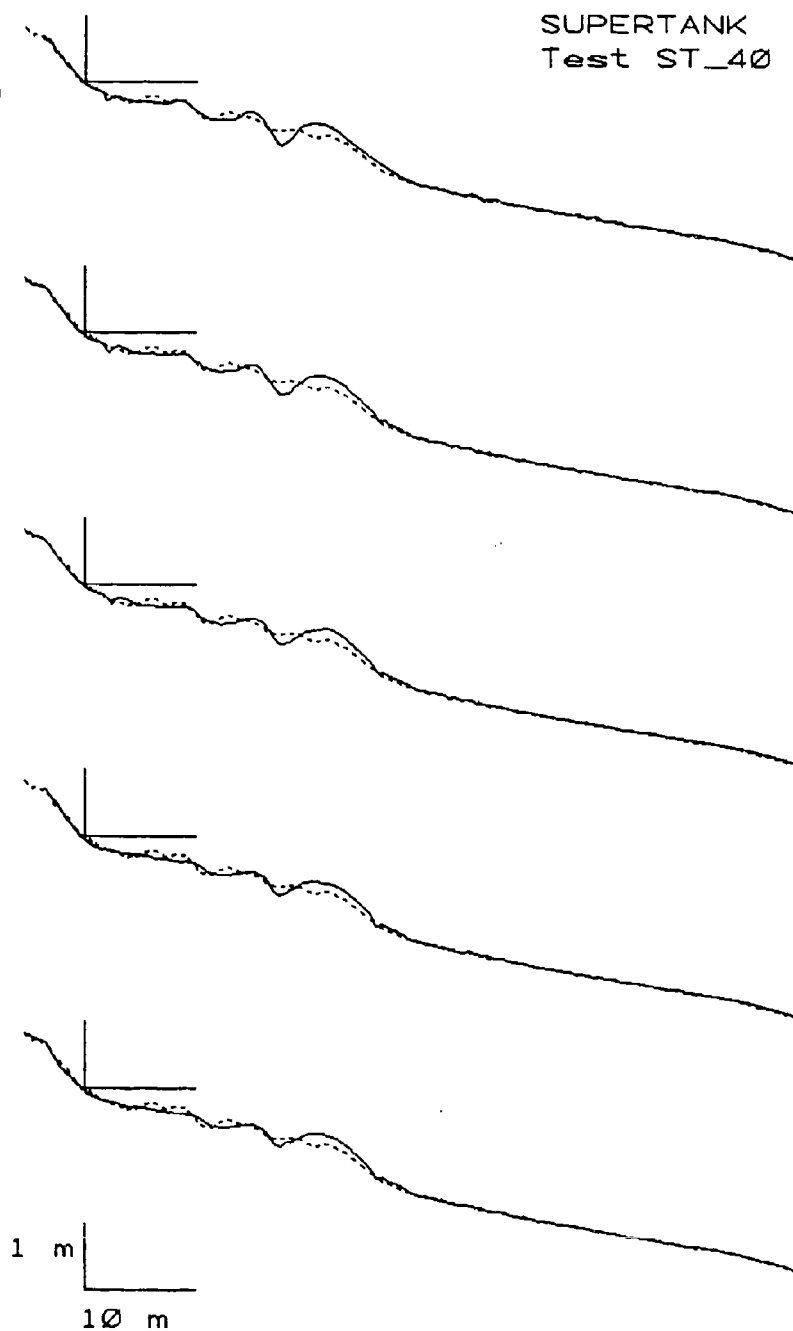
SUPERTANK  
Test ST\_40

8: 57  
150 min

10: 10  
190 min

13: 32  
230 min

14: 40  
270 min



15:45  
310 min

SUPERTANK  
Test ST\_40

17:35  
350 min

18:35  
390 min

910821  
7:45  
430 min

8:50  
470 min

1 m  
10 m

B22

Appendix B Beach Profile Data

9: 55  
510 min

SUPERTANK  
Test ST\_40

11: 00  
550 min

12: 10  
590 min

1 m  
10 m



910822  
8:45  
10 min

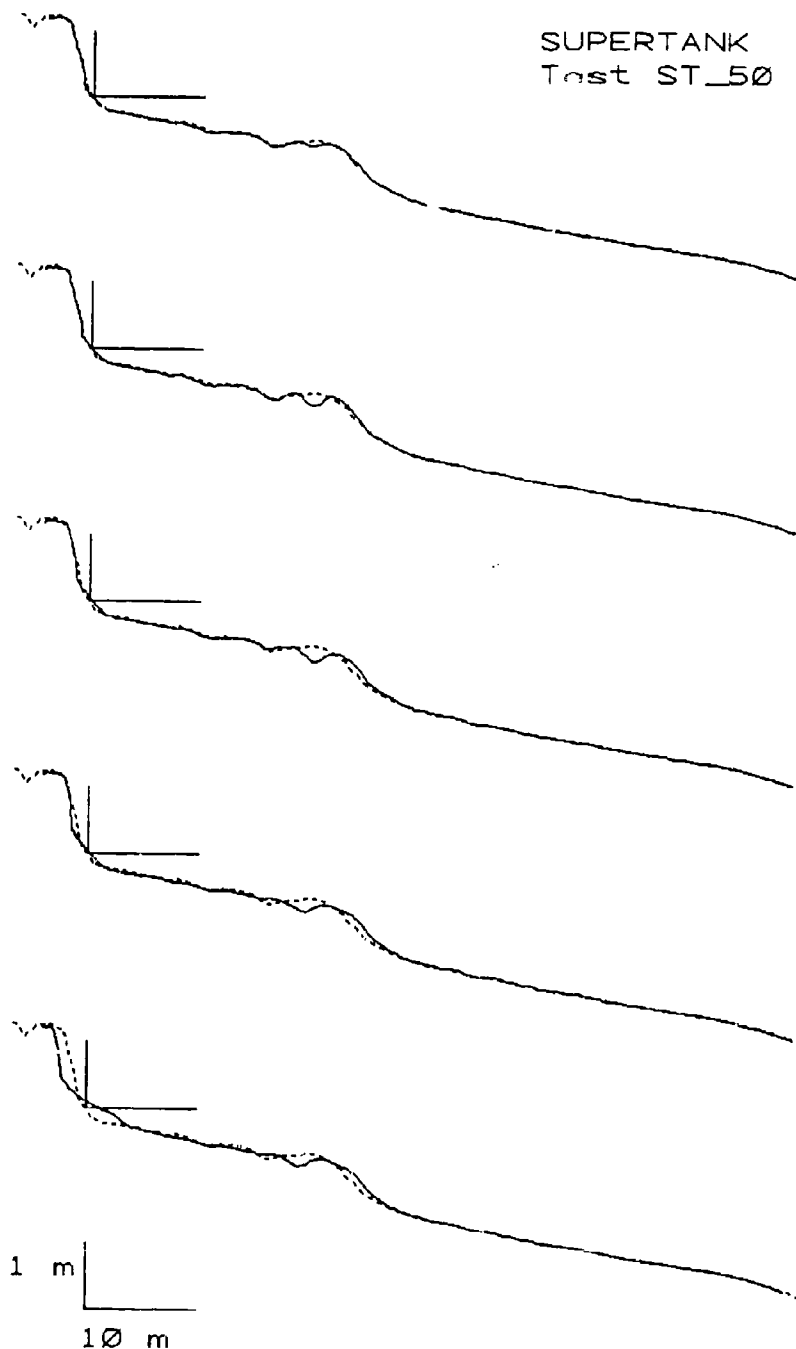
SUPERTANK  
Test ST\_50

9:15  
30 min

9:57  
60 min

10:55  
90 min

13:32  
120 min

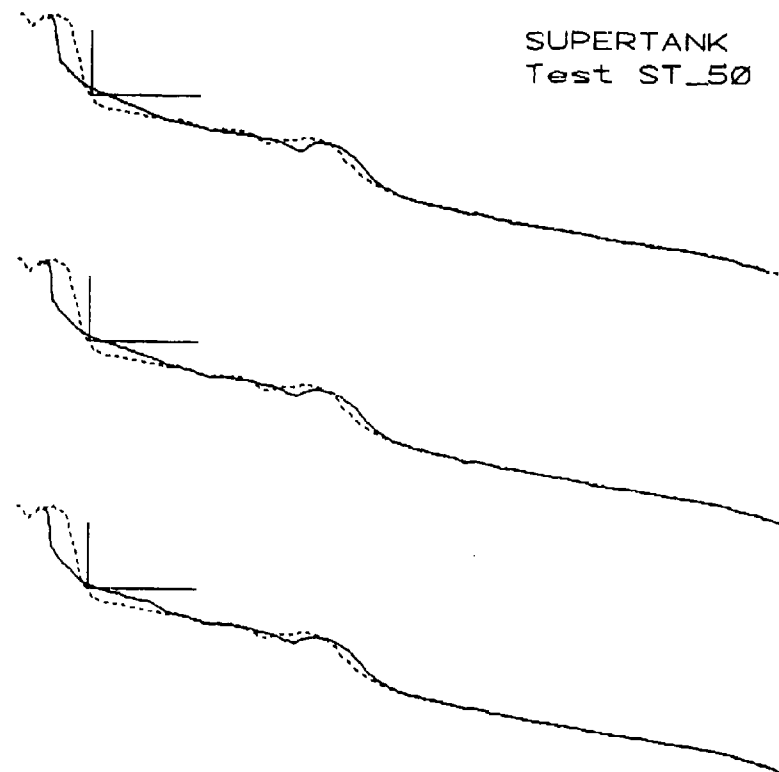


14:40  
150 min

SUPERTANK  
Test ST\_50

15:45  
180 min

16:40  
210 min



1 m  
10 m

910823  
8:05  
20 min

SUPERTANK  
Test ST\_60

8:55  
40 min

9:35  
60 min

10:20  
80 min

11:00  
100 min

1 m  
10 m

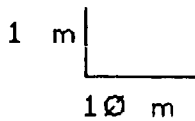
11:45  
120 min

SUPERTANK  
Test ST\_60

13:45  
140 min

15:25  
160 min

16:05  
180 min



910826  
9: 25  
10 min

SUPERTANK  
Test ST\_70

10: 00  
30 min

10: 40  
70 min

12: 45  
80 min

13: 21  
100 min

1 m  
10 m

B28

Appendix B Beach Profile Data

14:20  
120 min

SUPERTANK  
Test ST\_70

15:05  
160 min

17:45  
170 min

18:20  
190 min

18:55  
210 min

1 m  
10 m

910827

8: 20

10 min

SUPERTANK  
Test ST\_80

8: 45

30 min

9: 25

100 min

10: 55

120 min

11: 45

160 min

1 m

10 m

B30

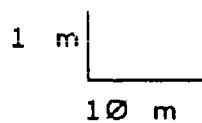
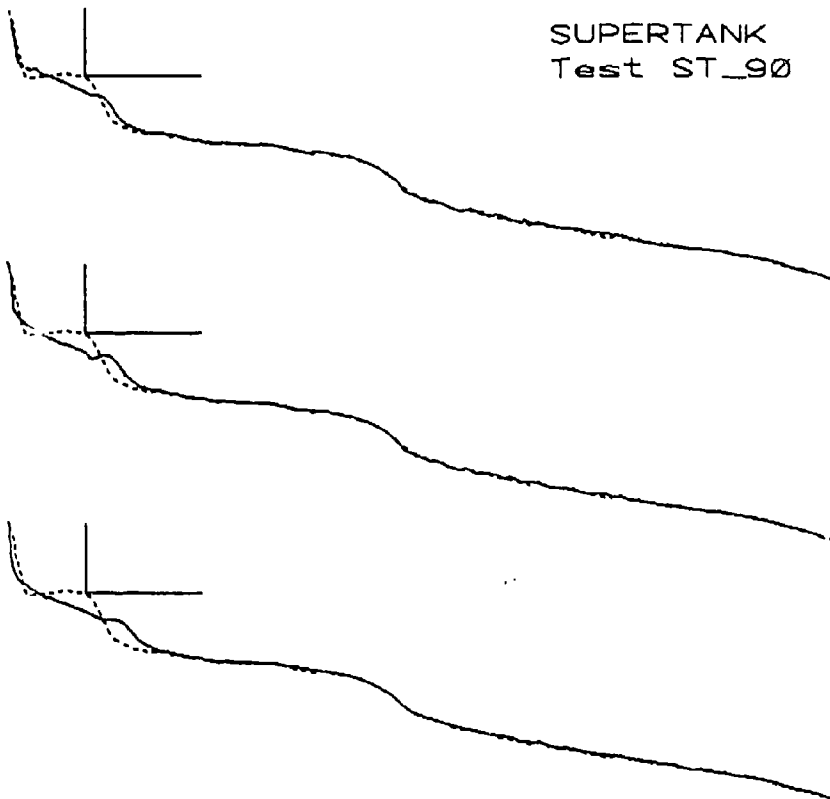
Appendix B Beach Profile Data

910828  
9: 30  
10 min

SUPERTANK  
Test ST\_90

10: 25  
30 min

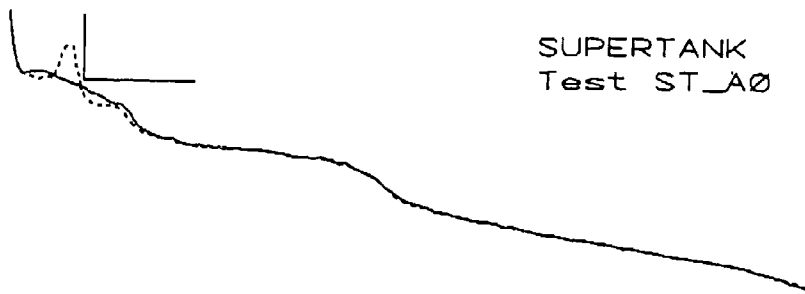
11: 20  
50 min





910828  
16:37  
10 min

SUPERTANK  
Test ST\_A0



1 m  
10 m

B32

Appendix B Beach Profile Data

910829  
12: 55  
18 min

SUPERTANK  
Test ST\_B0

18: 18  
29 min

910830  
9: 00  
49 min

12: 20  
58 min

17: 27  
99 min

1 m  
10 m

910902  
9: 55  
10 min

SUPERTANK  
Test ST\_C0

10: 52  
30 min

11: 47  
70 min

14: 10  
90 min

14: 55  
130 min

1 m  
10 m

16:05  
170 min

SUPERTANK  
Test ST\_C0

17:35  
210 min

18:42  
250 min

1 m  
10 m

910903  
9:00  
20 min

SUPERTANK  
Test ST\_D0

10:05  
40 min

11:05  
60 min

11:50  
80 min

1 m  
10 m

B36

Appendix B Beach Profile Data

910903  
14:30  
40 min

SUPERTANK  
Test ST\_E0

15:30  
80 min

16:30  
120 min

1 m  
10 m

910904  
9:55  
40 min

SUPERTANK  
Test ST\_F0

10:55  
80 min

11:55  
120 min

1 m  
10 m

910904  
14:10  
20 min

SUPERTANK  
Test ST\_G0

15:00  
60 min

16:15  
130 min

17:44  
140 min

18:20  
210 min

1 m  
10 m



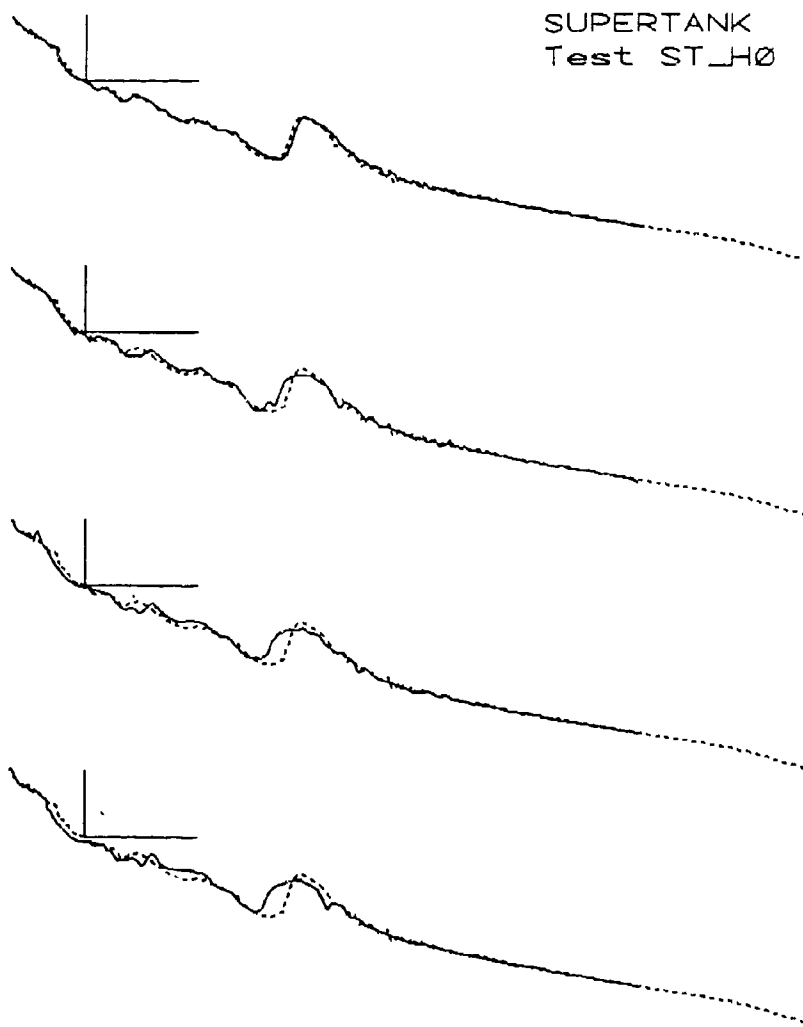
910905  
8: 25  
70 min

SUPERTANK  
Test ST\_H0

10: 06  
110 min

11: 10  
150 min

12: 10  
190 min



1 m  
10 m

910905  
13:35  
20 min

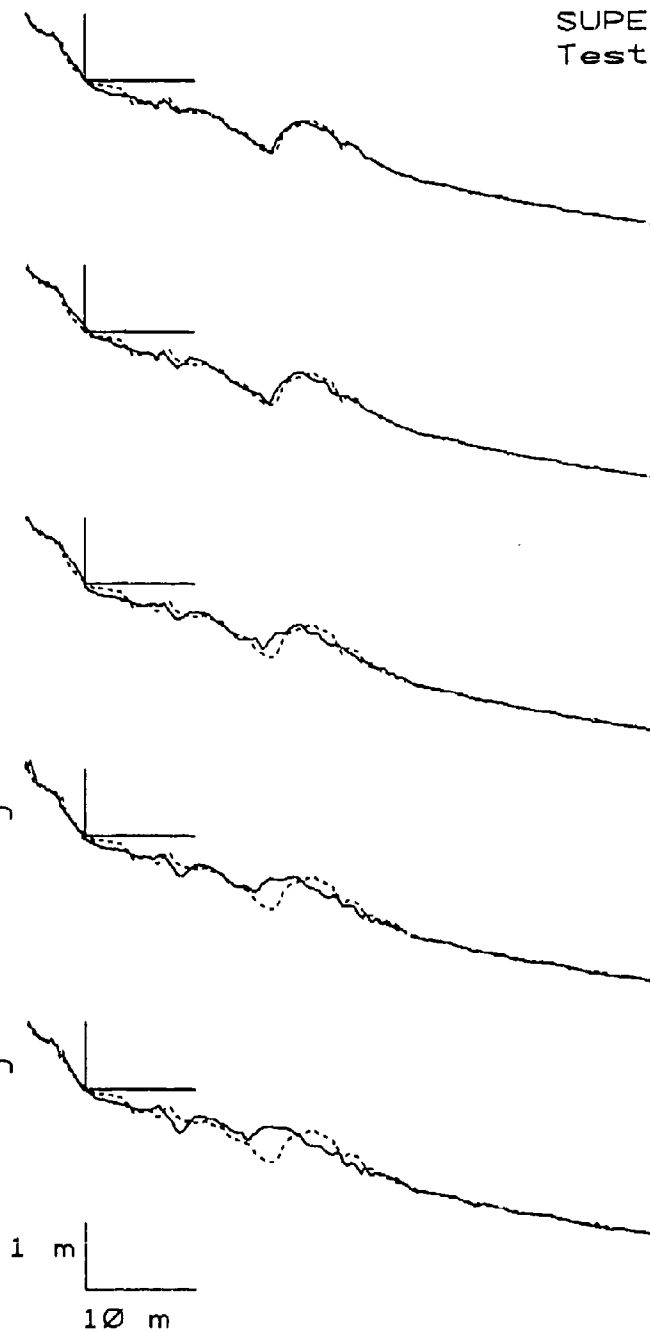
SUPERTANK  
Test ST\_I0

14:25  
40 min

15:15  
80 min

16:25  
150 min

17:55  
220 min



910906  
7: 55  
290 min

SUPERTANK  
Test ST\_I0

9: 30  
360 min

10: 55  
430 min

12: 25  
500 min

14: 05  
570 min

1 m  
10 m

16:00  
570 min

SUPERTANK  
Test ST\_I0

16:35  
610 min

1 m  
10 m

910909  
13:30  
20 min

SUPERTANK  
Test ST\_J0

14:20  
40 min

15:10  
80 min

16:10  
150 min

17:00  
150 min

1 m  
10 m

18:10  
220 min

SUPERTANK  
Test ST\_J0

910910  
8:00  
240 min

8:40  
280 min

9:40  
350 min

11:05  
420 min

1 m  
10 m

13:15  
490 min

SUPERTANK  
Test ST\_J0

14:45  
510 min

15:20  
530 min

15:55  
570 min

16:59  
640 min

1 m  
10 m

18:32  
680 min

SUPERTANK  
Test ST\_J0

910911  
7:00  
680 min

7:40  
700 min

8:15  
740 min

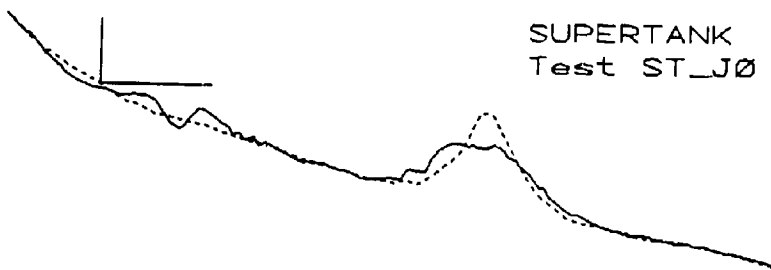
9:25  
810 min

1 m  
10 m



11:00  
880 min

SUPERTANK  
Test ST\_J0



1 m  
10 m

B48

Appendix B Beach Profile Data

910912  
8:25  
20 min

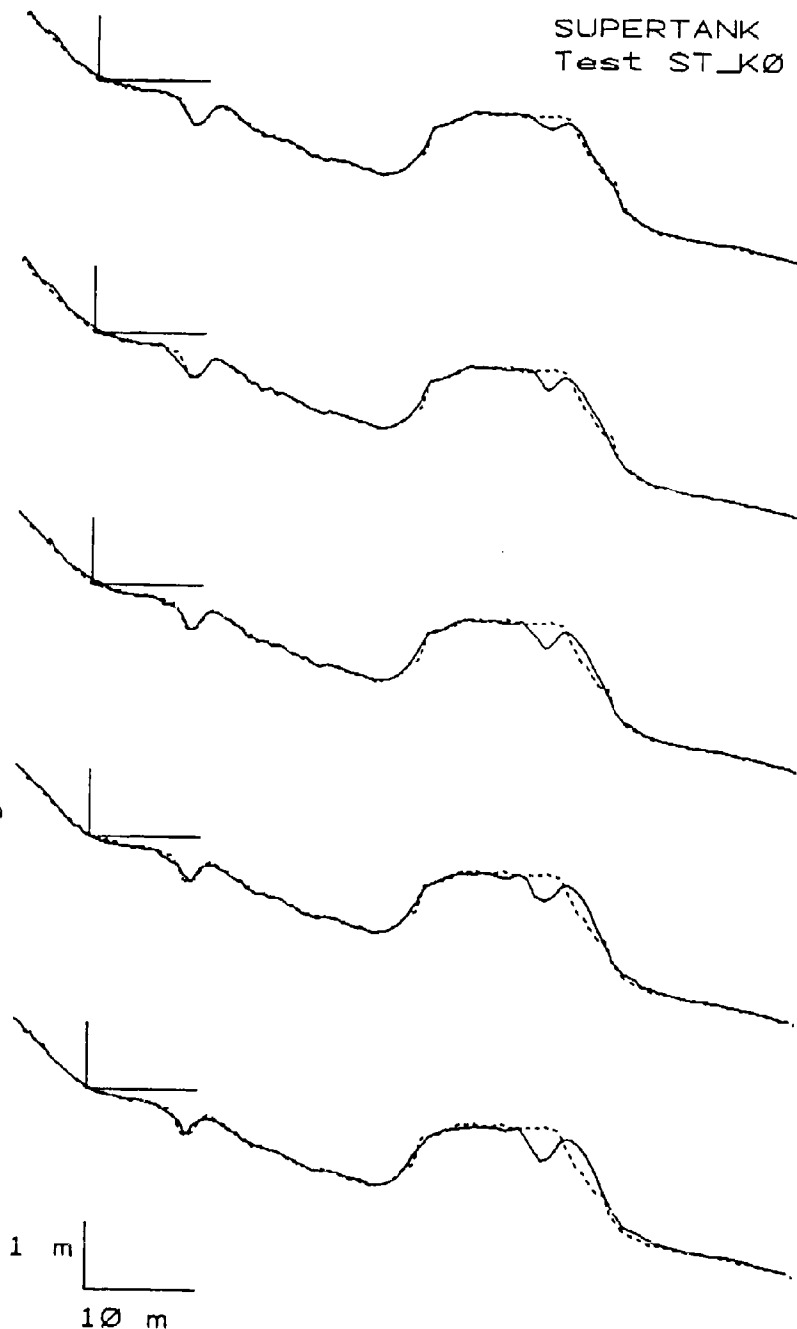
SUPERTANK  
Test ST\_K0

9:10  
40 min

9:50  
80 min

10:50  
150 min

12:20  
220 min



910912  
8:25  
20 min

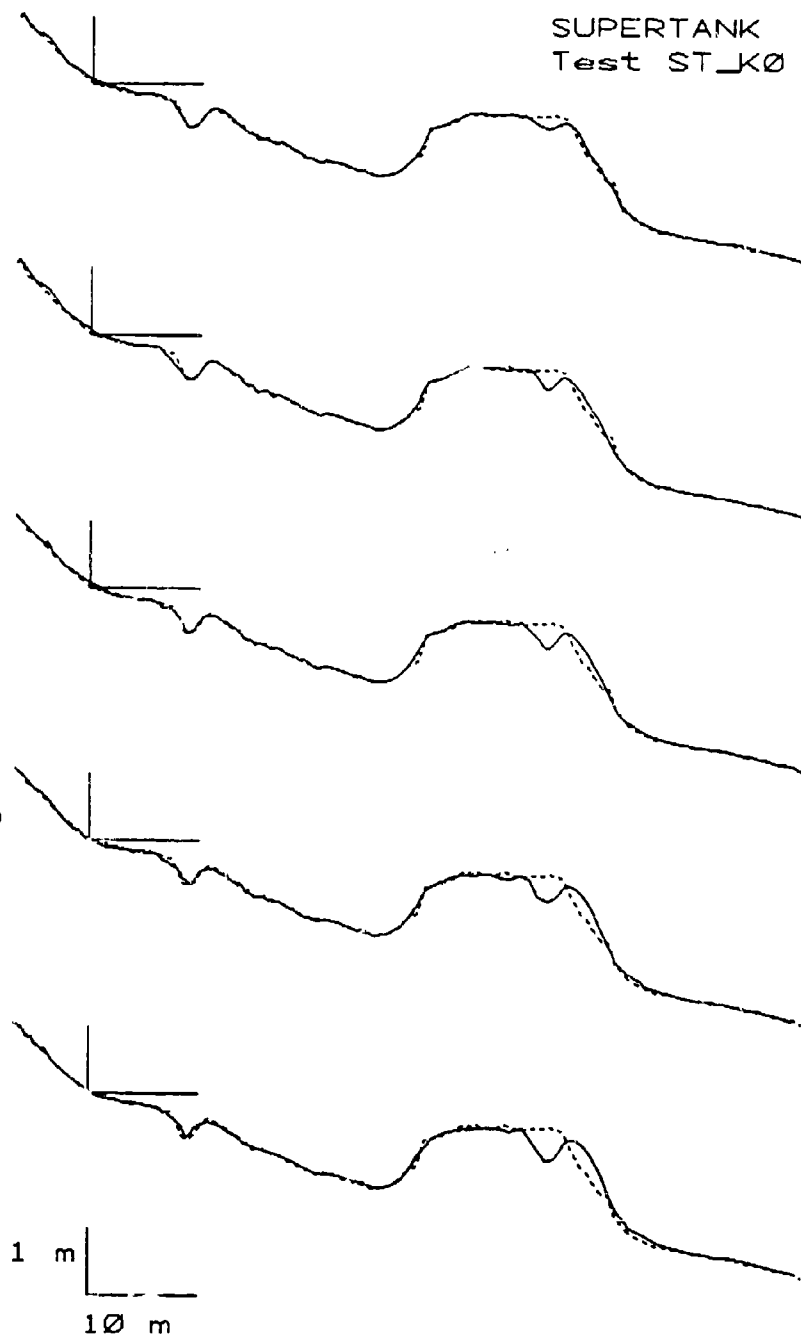
SUPERTANK  
Test ST\_K0

9:10  
40 min

9:50  
80 min

10:50  
150 min

12:20  
220 min



14: 20  
240 min

SUPERTANK  
Test ST\_K0

15: 05  
280 min

16: 05  
350 min

17: 30  
420 min

910913  
7: 35  
440 min

1 m  
10 m

8:15  
460 min

SUPERTANK  
Test ST\_K0

9:05  
500 min

10:03  
570 min

11:38  
610 min

13:13  
630 min

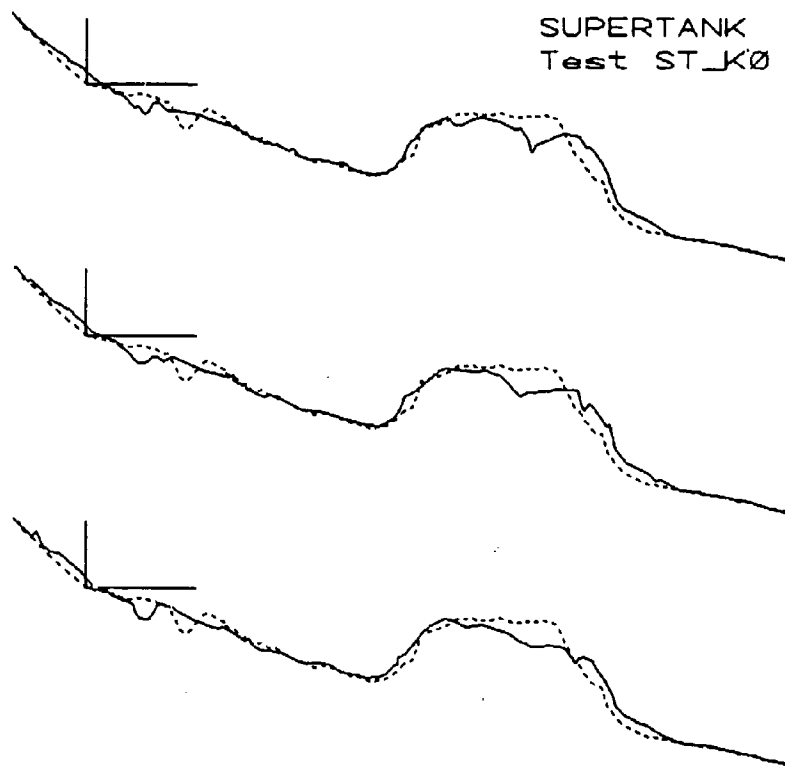
1 m  
10 m

14:05  
670 min

SUPERTANK  
Test ST\_K0

15:05  
740 min

16:44  
810 min



1 m  
10 m

# SUPERTANK Profile Survey Data

Table B1 Explanation of SUPERTANK Data Format	
Position	Description of Entry
First Data Line in Each Record	
1-5	Profile Location Number
6-10	Blank
11-16	Date of Survey (year, month, day)
17-21	Time of Survey (e.g., 1250 = 12:50)
22-24	Number of coordinate pairs in the survey
25-29	Minimum elevation in the survey (e.g., -1375 = -13.75 units)
30-40	Blank
41-44	First four distance-elevation pairs Both distance-elevation values have two significant digits (e.g., 360 -38 = Horizontal Distance 3.60 ft, Elevation -0.38 ft)
Following Data Lines in Each Record	
1-10	Same as first data line
11-80	Seven distance-elevation pairs

## Test ST 10

ST 3	910805	900100	15	-4	16	-4	69	-5	360	-38
ST 3	360	-38	422	-40	602	-67	607	-64	614	-67
ST 3	851	-88	960	-105	1172	-146	1278	-156	1314	-165
ST 3	1663	-214	1725	-232	1822	-246	1908	-263	1989	-279
ST 3	2228	-301	2284	-308	2406	-321	2407	-321	2408	-321
ST 3	3695	-491	3695	-491	3695	-491	3696	-491	3697	-491
ST 3	3697	-491	3697	-490	3698	-491	3700	-491	3721	-489
ST 3	3748	-499	3751	-499	3752	-499	3755	-499	3759	-498
ST 3	5068	-628	5172	-624	5182	-625	5238	-622	5450	-622
ST 3	6463	-726	6736	-751	6762	-761	6762	-762	6767	-762
ST 3	6769	-762	6884	-763	7198	-778	8466	-858	8980	-886
ST 3	10522	-957	11084	-976	11619	-977	12188	-996	12667	-1027
ST 3	13907	-1075	14770	-1092	15324	-1114	15891	-1137	16402	-1157
ST 3	17998	-1193	18528	-1206	19066	-1227	19601	-1232	20147	-1248
ST 3	21783	-1299	22292	-1308	22716	-1330	22942	-1363	23209	-1375
ST 6	910805	900	85	25	-6	28	-7	30	-5	30
ST 6	58	-5	321	-37	322	-28	325	-40	498	-51
ST 6	820	-103	990	-112	1124	-137	1246	-149	1392	-181
ST 6	1901	-256	2053	-278	2179	-290	2280	-306	2415	-315
ST 6	2441	-317	2668	-321	2892	-34	3155	-374	3415	-421
ST 6	3757	-496	3760	-495	3760	-496	3798	-493	3977	-504
ST 6	4733	-582	4995	-618	5258	-622	6036	-682	6168	-715
ST 6	6560	-743	6800	-759	7126	-777	7466	-798	7811	-828
ST 6	8903	-896	9213	-924	9668	-936	10203	-950	10752	-972
ST 6	12389	-1013	12946	-1038	13258	-1047	14012	-1063	14555	-1090
ST 6	16215	-1153	16750	-1169	17280	-1182	17815	-1189	18391	-1204
ST 6	20115	-1252	20691	-1272	21242	-1281	21813	-1299	22230	-1312
ST 6	22703	-1345	22919	-1357	23112	-1372	23228	-1378		
ST 9	910805	900148	35	-13	35	-13	36	-13	50	-13

ST 9	228	-34	250	-33	718	-83	725	-84	740	-85	826	-96	927	-113
ST 9	1076	-129	1140	-138	1188	-150	1344	-165	1427	-176	1547	-192	1646	-210
ST 9	1758	-224	1863	-244	1972	-260	2047	-273	2135	-282	2233	-292	2317	-302
ST 9	2332	-303	2466	-315	2466	-315	2472	-314	2489	-312	2602	-321	2733	-330
ST 9	2876	-341	3044	-359	3233	-390	3426	-425	3579	-454	3729	-481	3777	-498
ST 9	3779	-498	3779	-498	3804	-505	3991	-513	4145	-529	4298	-539	4462	-548
ST 9	4641	-572	4821	-597	4996	-614	5158	-625	5304	-625	5464	-635	5601	-648
ST 9	5731	-658	5863	-667	6013	-693	6099	-713	6099	-715	6100	-719	6100	-719
ST 9	6101	-718	6101	-718	6102	-715	6102	-718	6103	-718	6104	-718	6106	-718
ST 9	6143	-718	6244	-724	6370	-731	6531	-739	6701	-751	6892	-762	7070	-775
ST 9	7231	-788	7416	-799	7673	-822	7854	-839	8047	-848	8210	-858	8392	-870
ST 9	8582	-884	8776	-897	8983	-909	9176	-925	9369	-932	9559	-947	9772	-951
ST 9	9991	-95310191	-95810379	-95910603	-97110825	-97911117	-98611335	-990						
ST 9	11541	-99511738	-100011934	-100212147	-100512358	-101812568	-102512796	-1037						
ST 9	13013	-104113230	-104413462	-104813669	-105213890	-106214111	-107314307	-1084						
ST 9	14513	-109214831	-110315064	-111815301	-112515520	-113115761	-114216008	-1149						
ST 9	16244	-115816470	-116616713	-117416919	-117217155	-117517372	-117717572	-1185						
ST 9	17769	-119018003	-119618247	-120818478	-121918813	-122919028	-123519269	-1235						
ST 9	19505	-124019722	-124619930	-125020146	-126220363	-126720585	-127420839	-1277						
ST 9	21058	-128021266	-128321505	-129021731	-128821971	-130022164	-130922294	-1324						
ST 9	22304	-132322305	-132022335	-132822469	-1337									

ST 6	910805	945130			10	-5	15	-5	16	-3	109	6		
ST 6	215	-7	355	-21	489	-38	654	-57	818	-86	983	-107	1120	-122
ST 6	1244	-140	1405	-164	1641	-219	1642	-218	1645	-218	1646	-218	1646	-218
ST 6	1695	-211	1818	-238	2043	-256	2636	-340	2642	-339	2659	-337	3150	-440
ST 6	3153	-443	3285	-450	3444	-472	3478	-485	3482	-484	3484	-484	3484	-485
ST 6	3485	-484	3486	-484	3519	-483	3604	-487	3689	-500	3708	-505	3709	-505
ST 6	3709	-505	3709	-505	3710	-505	3710	-505	3712	-505	3713	-505	3721	-504
ST 6	3856	-507	4098	-524	4338	-544	4581	-562	4817	-582	5042	-605	5296	-622
ST 6	5558	-643	6189	-672	6211	-682	6212	-681	6228	-681	6370	-688	6548	-700
ST 6	6760	-719	7332	-772	7557	-794	7764	-820	7980	-831	8217	-847	8433	-862
ST 6	8661	-880	8882	-894	9108	-911	9337	-927	9545	-931	9772	-940	10005	-950
ST 6	10166	-94910401	-95710634	-96810980	-97611206	-97911463	-98211685	-988						
ST 6	11957	-100012221	-100912509	-102412800	-103713099	-104513373	-104813666	-1050						
ST 6	13968	-106314243	-108114501	-108814764	-109915055	-111015329	-112515805	-1134						
ST 6	16113	-114916452	-116416801	-117117128	-117817475	-118417826	-118618149	-1197						
ST 6	18485	-121218815	-122619130	-123319452	-123419761	-124320092	-125120422	-1265						
ST 6	20782	-127221146	-127721644	-129321946	-130422165	-131322386	-132122537	-1333						
ST 6	22541	-133922541	-133922541	-133922542	-133822542	-133922542	-133922542	-1338						
ST 6	22589	-133922784	-135023002	-136223230	-137223347	-138223347	-138223348	-1382						

ST 6	910805	1045116			5	-6	6	-6	8	-6	112	-5		
ST 6	163	-17	333	-25	455	-34	606	-56	772	-75	920	-91	1082	-116
ST 6	1253	-148	1390	-175	1513	-191	1642	-225	1642	-225	1646	-225	1679	-222
ST 6	1801	-244	1813	-247	2133	-288	2135	-288	2186	-288	2370	-299	2843	-419
ST 6	2848	-421	2976	-428	3175	-461	3355	-483	3418	-501	3418	-501	3421	-501
ST 6	3423	-501	3514	-497	3713	-515	3940	-533	4185	-549	4415	-567	4672	-587
ST 6	4945	-606	5207	-623	5472	-633	5747	-670	6012	-710	6166	-724	6167	-724
ST 6	6168	-723	6173	-722	6232	-719	6386	-703	6585	-680	6815	-677	6965	-703
ST 6	7219	-732	7552	-767	7815	-804	8076	-829	8318	-849	8574	-869	8825	-888
ST 6	9093	-909	9358	-926	9634	-935	9913	-94210220	-95810510	-96510811	-977			
ST 6	11099	-97911404	-98311681	-98812097	-99512425	-101712757	-103113085	-1037						
ST 6	13443	-104713768	-105714106	-106714449	-108614755	-109915047	-111015341	-1122						
ST 6	15625	-113315896	-114216190	-115516436	-116116558	-117116558	-117116558	-1171						
ST 6	16558	-117116558	-117116558	-117116645	-117016803	-117317011	-117617231	-1181						
ST 6	17458	-118617695	-118917947	-119118179	-120018424	-121018664	-122218929	-1229						
ST 6	19199	-123319479	-123519754	-124320048	-125120358	-126220618	-126821126	-1276						
ST 6	21441	-128921753	-129822056	-130722370	-131822672	-133822959	-136023136	-1371						

ST 3	910805	1230101			4	-2	5	-2	172	-17	178	-17		
ST 3	234	-15	386	-40	388	-40	410	-42	657	-73	753	-89	907	-114
ST 3	1083	-130	1718	-232	1741	-237	1777	-231	1890	-245	2073	-259	2375	-351
ST 3	2405	-371	2441	-367	2744	-436	2745	-434	2834	-434	2969	-454	3091	-472
ST 3	3170	-483	3192	-491	3194	-490	3195	-489	3210	-488	3348	-495	3534	-509
ST 3	3724	-518	3927	-533	4148	-548	4371	-559	4688	-579	4855	-599	4978	-604
ST 3	5158	-617	5337	-621	5496	-621	5674	-634	5872	-661	6039	-697	6236	-725
ST 3	6306	-740	6370	-739	6474	-743	6615	-741	6819	-723	6938	-686	7094	-672
ST 3	7238	-678	7408	-687	7564	-705	7814	-738	8581	-837	8930	-871	9270	-899
ST 3	9604	-928	9919	-93410307	-94910693	-96111103	-97111530	-98311948	-991					
ST 3	12370	-100712780	-102213197	-103313603	-104614014	-106014422	-107714986	-1092						
ST 3	15400	-111315816	-112716243	-114816640	-116017033	-116917428	-117717851	-1184						
ST 3	18261	-119818675	-121119080	-122019508	-122819866	-124120147	-124520507	-1253						
ST 3	20923	-126221305	-127621797	-129221905	-130121913	-130122033	-130322294	-1310						
ST 3	22579	-132222899	-134623194	-136423442	-137823533	-138823555	-1394							



# Appendix C

## Hydrodynamic Data

*by Jane McKee Smith*

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### Tables of Wave and Current Data

Pages C2-C5 of this appendix provide sample listings of Tables C1 (Spectral Wave Parameters), C2 (Time Series Wave Parameters), C3 (Spectra Current Parameters), and C4 (Statistical Current Parameters). The wave and current parameters are defined in Chapter 3 of Volume I of this report. Gauge positions are described in Chapter 3 and in Appendix A. The full data tables are given in the ASCII files TABLE\_C1, TABLE\_C2, TABLE\_C3, and TABLE\_C4 on the enclosed diskettes.

Table C1

## Spectral Wave Parameters

Run	Chan	$\eta$ m	Total				Low Pass				High Pass			
			$\sigma$ m	$H_{rms}$ m	$H_{mo}$ m	$T_p$ sec	$\sigma$ m	$H_{rms}$ m	$H_{mo}$ m	$T_p$ sec	$\sigma$ m	$H_{rms}$ m	$H_{mo}$ m	$T_p$ sec
a0509a	1	-0.071	0.139	0.393	0.556	3.0	0.053	0.150	0.212	42.7	0.128	0.362	0.513	3.0
a0509a	2	-0.013	0.157	0.444	0.628	3.0	0.041	0.116	0.165	42.7	0.151	0.428	0.606	3.0
a0509a	3	-0.011	0.167	0.472	0.668	3.1	0.037	0.106	0.150	42.7	0.163	0.460	0.651	3.1
a0509a	4	-0.010	0.167	0.472	0.668	3.1	0.033	0.095	0.134	42.7	0.163	0.462	0.655	3.1
a0509a	5	-0.009	0.172	0.487	0.689	3.1	0.031	0.089	0.126	42.7	0.169	0.479	0.677	3.1
a0509a	6	-0.009	0.177	0.501	0.709	3.1	0.030	0.085	0.120	23.3	0.174	0.493	0.698	3.1
a0509a	7	-0.010	0.174	0.492	0.696	2.9	0.029	0.082	0.116	23.3	0.171	0.485	0.686	2.9
a0509a	8	-0.007	0.181	0.513	0.726	2.9	0.025	0.072	0.102	23.3	0.179	0.508	0.718	2.9
a0509a	9	-0.007	0.183	0.518	0.733	2.9	0.024	0.068	0.096	23.3	0.181	0.513	0.726	2.9
a0509a	10	-0.006	0.180	0.508	0.719	2.9	0.024	0.066	0.094	23.3	0.178	0.503	0.712	2.9
a0509a	11	-0.007	0.182	0.516	0.730	3.0	0.024	0.067	0.094	42.7	0.181	0.511	0.724	3.0
a0509a	12	-0.006	0.182	0.514	0.728	2.9	0.023	0.065	0.092	42.7	0.180	0.510	0.722	2.9
a0509a	13	-0.007	0.185	0.524	0.742	2.9	0.022	0.063	0.089	42.7	0.184	0.520	0.736	2.9
a0509a	14	-0.006	0.190	0.539	0.763	3.0	0.021	0.060	0.085	42.7	0.189	0.535	0.758	3.0
a0509a	15	-0.006	0.189	0.534	0.756	2.9	0.021	0.058	0.083	42.7	0.188	0.531	0.751	2.9
a0509a	16	-0.006	0.191	0.541	0.766	3.0	0.020	0.058	0.082	42.7	0.190	0.538	0.762	3.0
a0510a	1	0.014	0.118	0.333	0.471	3.0	0.045	0.127	0.180	42.7	0.103	0.306	0.433	3.0
a0510a	2	-0.022	0.157	0.444	0.628	3.0	0.040	0.114	0.162	42.7	0.151	0.428	0.606	3.0
a0510a	3	-0.008	0.170	0.481	0.681	3.0	0.035	0.100	0.141	42.7	0.166	0.470	0.665	3.0
a0510a	4	-0.009	0.167	0.473	0.670	3.0	0.032	0.090	0.127	42.7	0.164	0.464	0.657	3.0
a0510a	5	-0.009	0.171	0.483	0.684	3.0	0.030	0.085	0.121	21.3	0.168	0.475	0.673	3.0
a0510a	6	-0.007	0.176	0.498	0.705	3.0	0.028	0.079	0.112	21.3	0.174	0.491	0.696	3.0
a0510a	7	-0.008	0.174	0.493	0.697	3.0	0.027	0.076	0.108	21.3	0.172	0.486	0.688	3.0
a0510a	8	-0.006	0.181	0.511	0.723	3.0	0.025	0.070	0.099	21.3	0.179	0.506	0.716	3.0
a0510a	9	-0.005	0.182	0.516	0.730	3.0	0.024	0.068	0.096	14.2	0.181	0.511	0.723	3.0
a0510a	10	-0.005	0.179	0.506	0.716	3.0	0.023	0.065	0.092	15.1	0.177	0.501	0.710	3.0
a0510a	11	-0.005	0.182	0.515	0.729	3.0	0.023	0.066	0.094	15.1	0.180	0.510	0.722	3.0
a0510a	12	-0.005	0.181	0.511	0.724	3.0	0.023	0.066	0.094	42.7	0.179	0.507	0.717	3.0
a0510a	13	-0.006	0.184	0.520	0.736	3.0	0.023	0.066	0.094	42.7	0.182	0.515	0.729	3.0
a0510a	14	-0.005	0.191	0.539	0.763	3.0	0.022	0.063	0.089	42.7	0.189	0.535	0.758	3.0
a0510a	15	-0.006	0.190	0.538	0.761	2.9	0.021	0.059	0.083	42.7	0.189	0.534	0.757	2.9
a0510a	16	-0.004	0.194	0.549	0.777	3.0	0.020	0.055	0.078	42.7	0.193	0.546	0.772	3.0
a0512a	1	0.003	0.104	0.294	0.416	3.1	0.037	0.105	0.149	42.7	0.097	0.273	0.387	3.1
a0512a	2	-0.105	0.167	0.473	0.669	3.0	0.041	0.117	0.166	15.1	0.162	0.457	0.647	3.0
a0512a	3	-0.011	0.172	0.486	0.688	3.0	0.037	0.104	0.147	15.1	0.168	0.475	0.672	3.0
a0512a	4	-0.009	0.166	0.470	0.665	3.0	0.034	0.096	0.137	15.1	0.162	0.459	0.650	3.0
a0512a	5	-0.011	0.171	0.483	0.684	3.0	0.033	0.090	0.127	23.3	0.168	0.474	0.672	3.0
a0512a	6	-0.008	0.178	0.503	0.713	3.0	0.029	0.082	0.116	23.3	0.175	0.496	0.703	3.0
a0512a	7	-0.008	0.177	0.500	0.708	3.0	0.028	0.080	0.113	23.3	0.174	0.493	0.699	3.0
a0512a	8	-0.006	0.182	0.515	0.729	3.0	0.027	0.077	0.109	23.3	0.180	0.509	0.720	3.0
a0512a	9	-0.006	0.185	0.524	0.742	3.0	0.026	0.079	0.111	15.1	0.183	0.518	0.733	3.0
a0512a	10	-0.006	0.183	0.518	0.733	3.0	0.026	0.075	0.106	15.1	0.181	0.512	0.724	3.0
a0512a	11	-0.006	0.184	0.520	0.737	3.0	0.025	0.072	0.102	15.1	0.182	0.515	0.729	3.0
a0512a	12	-0.005	0.184	0.521	0.738	3.0	0.023	0.066	0.094	15.1	0.183	0.517	0.731	3.0
a0512a	13	-0.006	0.186	0.527	0.747	3.0	0.022	0.063	0.088	15.1	0.185	0.523	0.741	3.0
a0512a	14	-0.004	0.191	0.541	0.766	3.0	0.020	0.056	0.079	42.7	0.190	0.538	0.762	3.0
a0512a	15	-0.004	0.192	0.542	0.767	3.0	0.019	0.053	0.075	42.7	0.191	0.539	0.763	3.0
a0512a	16	-0.005	0.194	0.550	0.778	3.0	0.018	0.052	0.074	42.7	0.193	0.547	0.774	3.0
a0515a	1	-0.015	0.106	0.299	0.423	3.0	0.037	0.105	0.149	42.7	0.099	0.279	0.395	3.0
a0515a	2	-0.010	0.146	0.414	0.586	3.0	0.042	0.118	0.168	15.1	0.140	0.395	0.560	3.0
a0515a	3	-0.012	0.167	0.473	0.670	3.0	0.039	0.110	0.156	15.1	0.163	0.460	0.651	3.0
a0515a	4	-0.009	0.167	0.472	0.668	3.0	0.036	0.101	0.144	23.3	0.163	0.461	0.652	3.0
a0515a	5	-0.006	0.174	0.492	0.697	3.0	0.033	0.093	0.132	23.3	0.171	0.483	0.684	3.0
a0515a	6	0.000	0.173	0.502	0.711	3.0	0.030	0.085	0.121	23.3	0.175	0.495	0.700	3.0
a0515a	7	-0.003	0.176	0.498	0.705	3.0	0.030	0.084	0.119	23.3	0.173	0.490	0.694	3.0
a0515a	8	-0.001	0.183	0.517	0.732	3.0	0.029	0.081	0.115	23.3	0.180	0.510	0.722	3.0
a0515a	9	0.000	0.185	0.523	0.741	3.0	0.029	0.082	0.116	23.3	0.183	0.516	0.731	3.0
a0515a	10	0.000	0.183	0.516	0.731	3.0	0.027	0.077	0.109	15.1	0.180	0.510	0.722	3.0
a0515a	11	-0.001	0.184	0.521	0.738	3.0	0.026	0.072	0.103	15.1	0.182	0.516	0.731	3.0
a0515a	12	-0.001	0.184	0.519	0.735	3.0	0.024	0.067	0.095	15.1	0.182	0.515	0.729	3.0
a0515a	13	-0.001	0.186	0.527	0.746	3.0	0.022	0.063	0.089	15.1	0.185	0.523	0.741	3.0
a0515a	14	-0.002	0.191	0.540	0.764	3.0	0.020	0.056	0.080	42.7	0.190	0.537	0.760	3.0
a0515a	15	-0.003	0.192	0.544	0.770	3.0	0.019	0.054	0.073	42.7	0.191	0.541	0.765	3.0
a0515a	16	-0.003	0.194	0.549	0.778	3.0	0.019	0.053	0.075	42.7	0.193	0.546	0.774	3.0
a0517a	1	0.000	0.108	0.304	0.431	3.0	0.038	0.107	0.151	42.7	0.100	0.284	0.402	3.0
a0517a	2	0.044	0.124	0.351	0.497	3.0	0.044	0.125	0.176	15.1	0.116	0.327	0.463	3.0
a0517a	3	-0.016	0.169	0.477	0.675	3.0	0.041	0.115	0.163	15.1	0.163	0.462	0.654	3.0

Table C2  
Time Series Wave Parameters

Run	Chan	$\bar{\eta}$ m	M	$\sigma$ m	$\mu_1$	$\mu_2$	$\bar{H}$ m	$\bar{T}$ sec	$H_{rms}$ m	$H_s$ m	$T_s$ sec	$H_{10}$ m	$T_{10}$ sec	$H_{max}$ m	$T_{max}$ sec	
a0509a	1	-0.071	T	367	0.140	0.816	3.449	0.403	2.8	0.431	0.566	3.1	0.660	3.2	0.783	3.4
		L	69	0.057	-0.029	3.333	0.111	14.8	0.127	0.181	22.4	0.239	29.6	0.280	33.4	
		H	377	0.128	1.050	3.714	0.395	2.7	0.421	0.550	3.0	0.624	3.1	0.698	3.2	
a0509a	2	-0.013	T	354	0.157	0.850	3.393	0.460	2.9	0.493	0.658	3.0	0.753	3.1	0.897	3.1
		L	68	0.041	0.152	2.980	0.092	15.1	0.101	0.138	19.0	0.172	21.2	0.196	29.7	
		H	363	0.151	1.069	3.742	0.449	2.8	0.483	0.646	3.0	0.729	3.0	0.841	3.0	
a0509a	3	-0.011	T	360	0.167	0.795	3.284	0.469	2.8	0.509	0.693	3.0	0.797	3.1	0.941	3.1
		L	69	0.038	0.068	2.875	0.086	14.8	0.095	0.130	20.6	0.162	19.5	0.194	12.3	
		H	362	0.163	0.989	3.601	0.465	2.8	0.505	0.688	3.0	0.784	3.0	0.908	3.3	
a0509a	4	-0.010	T	359	0.167	0.706	3.123	0.463	2.9	0.504	0.693	3.0	0.794	3.0	0.905	3.3
		L	70	0.034	0.007	2.674	0.078	14.6	0.085	0.116	20.2	0.134	18.6	0.168	19.9	
		H	365	0.163	0.896	3.428	0.455	2.8	0.497	0.684	3.0	0.785	3.0	0.877	3.3	
a0509a	5	-0.009	T	360	0.172	0.662	3.152	0.473	2.8	0.519	0.720	3.0	0.838	3.1	0.938	3.0
		L	72	0.031	0.074	2.664	0.075	14.2	0.082	0.113	20.2	0.140	18.2	0.160	17.4	
		H	363	0.169	0.851	3.465	0.469	2.8	0.515	0.714	3.0	0.838	3.0	0.956	3.0	
a0509a	6	-0.009	T	363	0.177	0.608	3.157	0.479	2.8	0.532	0.745	3.0	0.879	3.0	1.046	3.1
		L	80	0.030	0.154	2.781	0.070	12.8	0.078	0.111	17.4	0.137	16.6	0.168	12.4	
		H	367	0.174	0.811	3.511	0.474	2.8	0.528	0.741	2.9	0.884	3.0	1.073	3.1	
a0509a	7	-0.010	T	363	0.174	0.535	3.057	0.469	2.8	0.521	0.728	3.0	0.868	3.0	1.045	3.1
		L	82	0.029	0.012	2.838	0.067	12.5	0.075	0.105	16.2	0.136	17.3	0.168	11.0	
		H	366	0.171	0.761	3.411	0.466	2.8	0.517	0.724	2.9	0.862	3.0	1.059	2.9	
a0509a	8	-0.007	T	368	0.181	0.529	3.157	0.479	2.8	0.535	0.750	3.0	0.928	3.0	1.105	2.9
		L	71	0.025	-0.084	2.860	0.062	14.4	0.069	0.097	19.3	0.118	20.7	0.127	28.7	
		H	369	0.179	0.717	3.433	0.478	2.8	0.533	0.746	3.0	0.920	3.0	1.059	2.9	
a0509a	9	-0.007	T	372	0.183	0.445	3.055	0.477	2.8	0.536	0.755	2.9	0.927	3.0	1.128	3.0
		L	73	0.024	-0.058	2.956	0.057	14.0	0.065	0.094	19.7	0.115	20.5	0.134	19.2	
		H	374	0.181	0.634	3.302	0.474	2.7	0.533	0.753	2.9	0.923	3.0	1.098	3.0	
a0509a	10	-0.006	T	372	0.180	0.464	3.154	0.469	2.8	0.528	0.747	2.9	0.936	3.0	1.175	2.8
		L	73	0.024	-0.207	3.068	0.057	14.0	0.063	0.088	19.1	0.106	21.5	0.123	30.5	
		H	376	0.178	0.656	3.409	0.465	2.7	0.524	0.742	2.9	0.934	3.0	1.184	2.8	
a0509a	11	-0.007	T	370	0.182	0.423	3.148	0.475	2.8	0.533	0.754	2.9	0.950	2.9	1.160	3.1
		L	74	0.024	-0.201	2.967	0.056	13.8	0.062	0.088	18.5	0.103	17.0	0.135	14.5	
		H	371	0.181	0.627	3.417	0.474	2.8	0.532	0.752	2.9	0.946	2.9	1.145	2.9	
a0509a	12	-0.006	T	368	0.182	0.382	3.166	0.473	2.8	0.531	0.752	2.9	0.949	2.9	1.197	3.0
		L	69	0.023	-0.091	3.054	0.057	14.8	0.064	0.091	17.5	0.107	15.7	0.129	16.9	
		H	369	0.180	0.577	3.421	0.471	2.8	0.529	0.748	2.9	0.945	2.9	1.187	3.0	
a0509a	13	-0.007	T	365	0.185	0.444	3.269	0.488	2.8	0.547	0.771	2.9	0.972	3.0	1.272	3.1
		L	75	0.022	0.017	2.861	0.052	13.7	0.058	0.080	17.0	0.097	19.9	0.105	32.0	
		H	375	0.184	0.614	3.512	0.476	2.7	0.538	0.763	2.9	0.963	2.9	1.238	3.1	
a0509a	14	-0.006	T	375	0.190	0.450	3.292	0.493	2.7	0.556	0.789	2.9	1.004	3.0	1.293	3.0
		L	68	0.021	0.088	3.172	0.051	15.1	0.055	0.077	20.0	0.092	21.3	0.105	31.5	
		H	377	0.189	0.581	3.474	0.491	2.7	0.554	0.787	2.9	1.000	2.9	1.308	3.0	
a0509a	15	-0.006	T	376	0.189	0.407	3.327	0.487	2.7	0.549	0.775	2.9	1.005	2.9	1.393	3.0
		L	68	0.021	0.042	3.410	0.047	15.1	0.051	0.069	22.2	0.094	31.3	0.113	17.0	
		H	379	0.188	0.538	3.499	0.483	2.7	0.546	0.772	2.9	1.005	2.9	1.390	3.0	
a0509a	16	-0.006	T	373	0.191	0.358	3.357	0.492	2.7	0.556	0.785	2.9	1.019	2.9	1.418	3.0
		L	58	0.020	0.154	3.073	0.047	17.7	0.053	0.076	29.2	0.088	27.8	0.096	35.1	
		H	374	0.190	0.488	3.520	0.491	2.7	0.555	0.784	2.9	1.021	2.9	1.408	3.0	
a0510a	1	0.014	T	813	0.120	0.845	3.653	0.333	2.5	0.365	0.495	3.0	0.581	3.0	0.760	3.5
		L	114	0.052	0.184	3.040	0.112	18.0	0.126	0.175	25.8	0.229	24.6	0.343	9.4	
		H	841	0.108	1.109	4.078	0.327	2.4	0.356	0.480	2.9	0.553	2.9	0.703	3.5	
a0510a	2	-0.022	T	711	0.158	0.772	3.392	0.461	2.9	0.497	0.665	3.1	0.763	3.1	0.974	3.1
		L	130	0.044	-0.062	3.204	0.099	15.8	0.110	0.153	20.3	0.192	23.3	0.234	25.5	
		H	726	0.151	1.021	3.751	0.452	2.8	0.489	0.658	3.0	0.751	3.1	0.946	3.1	
a0510a	3	-0.008	T	725	0.170	0.744	3.186	0.471	2.8	0.515	0.703	3.0	0.809	3.1	0.929	3.3
		L	135	0.035	0.130	3.678	0.083	15.2	0.093	0.130	18.9	0.170	19.4	0.222	19.8	
		H	735	0.166	0.928	3.505	0.465	2.8	0.509	0.696	3.0	0.802	3.0	0.936	2.9	
a0510a	4	-0.009	T	721	0.167	0.721	3.216	0.463	2.8	0.507	0.697	3.0	0.819	3.1	0.979	3.4
		L	141	0.032	0.165	4.207	0.074	14.5	0.086	0.122	19.7	0.159	20.5	0.265	20.2	
		H	736	0.164	0.905	3.526	0.454	2.8	0.499	0.690	3.0	0.811	3.0	0.975	2.9	
a0510a	5	-0.009	T	732	0.171	0.686	3.255	0.465	2.8	0.513	0.715	3.0	0.846	3.0	1.050	3.2
		L	156	0.030	0.194	4.021	0.069	13.1	0.079	0.112	16.9	0.118	18.3	0.244	23.5	
		H	737	0.168	0.872	3.561	0.460	2.8	0.509	0.711	3.0	0.844	3.0	1.008	3.1	
a0510a	6	-0.007	T	736	0.176	0.627	3.273	0.473	2.8	0.526	0.742	3.0	0.901	3.0	1.094	3.1
		L	151	0.028	0.246	3.794	0.066	13.6	0.074	0.106	16.5	0.137	17.2	0.192	24.6	
		H	747	0.174	0.812	3.588	0.466	2.7	0.522	0.738	3.0	0.899	3.0	1.076	3.1	
a0510a	7	-0.008	T	749	0.174	0.537	3.112	0.459	2.7	0.514	0.726	3.0	0.882	3.0	1.022	3.1
		L	161	0.027	0.073	3.387	0.063	12.7	0.071	0.100	15.9	0.131	16.3	0.178	10.1	

Table C3

## Spectral Current Parameters

Run	Chan	W m/sec	Total		Low Pass		High Pass		Chan	W m/sec	Total		Low Pass		High Pass	
			$\sigma$ m/sec	$T_p$ sec	$\sigma$ m/sec	$T_p$ sec	$\sigma$ m/sec	$T_p$ sec			$\sigma$ m/sec	$T_p$ sec	$\sigma$ m/sec	$T_p$ sec	$\sigma$ m/sec	$T_p$ sec
a0509a	51	-0.011	0.078	3.0	0.026	256.0	0.074	3.0	52	0.064	0.398	3.1	0.141	42.7	0.372	3.1
a0509a	53	-0.004	0.142	3.1	0.038	85.3	0.136	3.1	54	0.061	0.373	3.1	0.126	42.7	0.351	3.1
a0509a	55	-0.003	0.204	3.0	0.039	128.0	0.200	3.0	56	0.054	0.393	3.1	0.117	42.7	0.375	3.1
a0509a	57	-0.025	0.379	2.9	0.091	51.2	0.366	2.9	58	0.002	0.467	3.1	0.129	42.7	0.447	3.1
a0509a	27	0.006	0.074	3.1	0.025	128.0	0.070	3.1	28	0.052	0.383	3.0	0.144	42.7	0.354	3.0
a0509a	29	-0.004	0.172	3.0	0.041	51.2	0.167	3.0	30	0.079	0.425	3.1	0.156	42.7	0.395	3.1
a0509a	33	-0.020	0.168	3.0	0.042	25.6	0.162	3.0	34	-0.028	0.264	3.0	0.090	42.7	0.246	3.0
a0509a	35	0.011	0.097	3.0	0.030	19.7	0.092	3.0	36	0.063	0.361	3.1	0.128	42.7	0.337	3.0
a0509a	37	-0.001	0.132	3.1	0.035	256.0	0.127	3.1	38	0.054	0.386	3.1	0.137	42.7	0.361	3.1
a0509a	39	0.000	0.193	3.1	0.039	256.0	0.189	3.1	40	0.056	0.386	3.1	0.122	42.7	0.365	3.1
a0509a	41	-0.020	0.189	3.0	0.038	42.7	0.185	3.0	42	0.008	0.177	3.0	0.070	42.7	0.160	3.0
a0509a	43	0.003	0.050	3.0	0.019	256.0	0.046	3.0	44	0.035	0.365	3.1	0.113	42.7	0.347	3.1
a0509a	45	-0.005	0.128	3.0	0.026	128.0	0.125	3.0	46	0.047	0.343	3.0	0.104	42.7	0.326	3.0
a0509a	47	0.000	0.235	2.9	0.040	64.0	0.231	2.9	48	0.059	0.395	3.0	0.099	42.7	0.382	3.0
a0509a	49	0.006	0.295	2.9	0.035	13.5	0.292	2.9	50	-0.076	0.329	3.0	0.127	36.6	0.302	3.0
a0509a	59	0.004	0.052	2.9	0.012	256.0	0.050	2.9	60	0.019	0.245	3.0	0.059	23.3	0.238	3.0
a0509a	61	0.003	0.137	3.1	0.058	9.1	0.123	3.1	62	0.118	0.432	3.0	0.200	42.7	0.382	3.0
a0509a	63	-0.029	0.202	3.0	0.049	256.0	0.195	3.0	64	0.025	0.381	3.0	0.137	42.7	0.353	3.0
a0510a	51	0.005	0.063	3.0	0.019	256.0	0.059	3.0	52	0.060	0.360	3.0	0.120	42.7	0.339	3.0
a0510a	53	-0.001	0.121	3.0	0.024	256.0	0.118	3.0	54	0.057	0.360	3.0	0.115	42.7	0.340	3.0
a0510a	55	0.002	0.198	3.0	0.032	128.0	0.195	3.0	56	0.060	0.387	3.0	0.108	42.7	0.371	3.0
a0510a	57	-0.023	0.390	2.9	0.093	28.4	0.377	2.9	58	-0.001	0.218	3.0	0.061	36.6	0.208	3.0
a0510a	27	0.006	0.077	3.0	0.023	51.2	0.074	3.0	28	0.051	0.384	3.0	0.130	42.7	0.361	3.0
a0510a	29	-0.005	0.176	3.0	0.037	64.0	0.172	3.0	30	0.059	0.420	3.0	0.140	42.7	0.395	3.0
a0510a	33	-0.028	0.174	3.0	0.043	42.7	0.168	3.0	34	-0.034	0.264	3.0	0.087	36.6	0.247	3.0
a0510a	35	0.024	0.092	3.0	0.027	128.0	0.087	3.0	36	0.063	0.362	3.0	0.117	42.7	0.343	3.0
a0510a	37	0.001	0.125	3.0	0.029	42.7	0.122	3.0	38	0.044	0.379	3.0	0.122	42.7	0.358	3.0
a0510a	39	-0.006	0.194	3.0	0.034	128.0	0.190	3.0	40	0.052	0.385	3.0	0.112	42.7	0.368	3.0
a0510a	41	-0.014	0.188	3.0	0.034	42.7	0.185	3.0	42	0.009	0.184	3.0	0.066	36.6	0.170	3.0
a0510a	43	0.006	0.049	3.0	0.015	256.0	0.046	3.0	44	0.037	0.364	3.0	0.108	42.7	0.347	3.0
a0510a	45	-0.007	0.128	3.0	0.024	256.0	0.126	3.0	46	0.049	0.338	3.0	0.096	42.7	0.323	3.0
a0510a	47	0.003	0.234	3.0	0.036	36.6	0.231	3.0	48	0.061	0.393	3.0	0.094	42.7	0.382	3.0
a0510a	49	0.009	0.298	3.0	0.033	128.0	0.296	3.0	50	-0.068	0.324	3.0	0.121	42.7	0.300	3.0
a0510a	59	0.004	0.056	3.0	0.016	128.0	0.053	3.0	60	0.027	0.248	3.0	0.063	28.4	0.240	3.0
a0510a	61	-1.897	1.291	1.0	0.250	7.3	1.263	1.0	62	-1.128	0.995	3.0	0.273	42.7	0.953	3.0
a0510a	63	-1.648	1.027	1.0	0.208	16.0	1.002	1.0	64	0.108	0.408	3.0	0.145	42.7	0.380	3.0
a0512a	51	0.001	0.070	3.0	0.022	256.0	0.066	3.0	52	0.066	0.362	3.0	0.117	42.7	0.342	3.0
a0512a	53	-0.004	0.127	3.0	0.029	256.0	0.124	3.0	54	0.066	0.360	3.0	0.111	42.7	0.342	3.0
a0512a	55	-0.001	0.203	3.0	0.034	256.0	0.200	3.0	56	0.059	0.385	3.0	0.102	42.7	0.371	3.0
a0512a	57	-0.022	0.392	3.0	0.098	25.6	0.377	3.0	58	-0.002	0.231	3.0	0.062	21.3	0.221	3.0
a0512a	27	0.008	0.072	3.0	0.022	51.2	0.068	3.0	28	0.056	0.395	3.0	0.144	42.7	0.367	3.0
a0512a	29	-0.007	0.176	3.0	0.041	85.3	0.170	3.0	30	0.065	0.433	3.0	0.147	42.7	0.406	3.0
a0512a	33	-0.024	0.171	3.0	0.041	85.3	0.166	3.0	34	-0.045	0.281	3.0	0.094	42.7	0.263	3.0
a0512a	35	0.018	0.072	3.0	0.021	256.0	0.069	3.0	36	0.058	0.368	3.0	0.109	42.7	0.351	3.0
a0512a	37	0.002	0.121	3.0	0.028	51.2	0.118	3.0	38	0.040	0.390	3.0	0.117	42.7	0.372	3.0
a0512a	39	0.000	0.190	3.0	0.035	85.3	0.186	3.0	40	0.047	0.397	3.0	0.108	42.7	0.381	3.0
a0512a	41	-0.016	0.200	3.0	0.034	51.2	0.196	3.0	42	0.010	0.201	3.0	0.072	21.3	0.186	3.0
a0512a	43	0.006	0.051	3.0	0.016	128.0	0.048	3.0	44	0.032	0.366	3.0	0.101	42.7	0.351	3.0
a0512a	45	-0.010	0.130	3.0	0.022	256.0	0.128	3.0	46	0.050	0.340	3.0	0.094	42.7	0.326	3.0
a0512a	47	-0.025	0.238	3.0	0.035	25.6	0.235	3.0	48	0.057	0.395	3.0	0.094	42.7	0.384	3.0
a0512a	49	0.009	0.304	3.0	0.035	51.2	0.301	3.0	50	-0.076	0.324	3.0	0.115	42.7	0.302	3.0
a0512a	59	0.003	0.053	3.0	0.012	256.0	0.052	3.0	60	0.028	0.248	3.0	0.062	21.3	0.240	3.0
a0512a	61	0.009	0.070	0.9	0.018	25.6	0.067	0.9	62	0.132	0.470	3.0	0.234	23.3	0.406	3.0
a0512a	63	-0.009	0.181	2.9	0.042	256.0	0.176	2.9	64	-0.033	0.291	23.3	0.128	23.3	0.260	3.2
a0515a	51	0.000	0.065	3.0	0.021	256.0	0.061	3.0	52	0.054	0.365	3.0	0.115	42.7	0.346	3.0
a0515a	53	-0.001	0.124	3.0	0.029	256.0	0.120	3.0	54	0.057	0.366	3.0	0.112	42.7	0.348	3.0
a0515a	55	0.004	0.200	3.0	0.033	256.0	0.198	3.0	56	0.060	0.393	3.0	0.102	42.7	0.379	3.0
a0515a	57	-0.030	0.397	3.0	0.097	25.6	0.383	3.0	58	0.000	0.216	3.0	0.058	15.1	0.207	3.0
a0515a	27	0.011	0.059	3.0	0.018	256.0	0.056	3.0	28	0.073	0.428	3.0	0.163	42.7	0.395	3.0
a0515a	29	-0.008	0.167	3.0	0.041	64.0	0.161	3.0	30	0.077	0.468	3.0	0.164	42.7	0.437	3.0
a0515a	33	-0.030	0.175	3.0	0.043	28.4	0.169	3.0	34	-0.039	0.323	3.0	0.107	42.7	0.303	3.0
a0515a	35	0.002	0.070	3.0	0.021	256.0	0.066	3.0	36	0.060	0.376	3.0	0.115	42.7	0.357	3.0
a0515a	37	-0.005	0.121	3.0	0.028	256.0	0.118	3.0	38	0.049	0.387	3.0	0.116	42.7	0.368	3.0
a0515a	39	0.008	0.189	3.0	0.034	256.0	0.185	3.0	40	0.055	0.395	3.0	0.108	42.7	0.380	3.0
a0515a	41	-0.017	0.204	3.0	0.033	256.0	0.201	3.0	42	0.018	0.194	3.0	0.072	42.7	0.178	3.0
a0515a	43	0.000	0.050	3.0	0.015	256.0	0.048	3.0	44	0.032	0.369	3.0	0.102	42.7	0.354	3.0
a0515a	45	0.001	0.129	3.0	0.022	256.0	0.127	3.0	46	0.040	0.342	3.0	0.095	42.7	0.328	3.0
a0515a	47	-0.011	0.235	3.0	0.033	21.3	0.232	3.0	48	0.063	0.397	3.0	0.094	42.7	0.385	3.0

Table C4

## Statistical Current Parameters

Run	Chan	$\bar{u}$	$\sigma$	% wet	Total				Low Pass				High Pass					
					$u_{max}$	$u_{min}$	$\sigma$	$\sigma$	$u_{max}$	$u_{min}$	$\sigma$	$\sigma$	$u_{max}$	$u_{min}$	$\sigma$	$\sigma$		
					$\mu_A$	$\mu_B$	m/sec	m/sec	$\mu_A$	$\mu_B$	m/sec	m/sec	$\mu_A$	$\mu_B$	m/sec	m/sec		
a0509a	51	-0.011	1.000	0.079	-0.19	7.06	0.42	-0.61	0.026	0.12	4.70	0.10	-0.13	0.074	-0.11	6.59	0.42	-0.57
a0509a	52	0.064	1.000	0.398	0.37	3.79	2.44	-1.36	0.141	0.92	5.05	0.80	-0.26	0.372	-0.09	3.54	2.10	-1.37
a0509a	53	-0.004	1.000	0.142	-0.03	4.66	0.78	-0.81	0.038	-0.37	4.57	0.13	-0.19	0.136	0.08	4.36	0.73	-0.74
a0509a	54	0.061	1.000	0.374	0.05	2.44	1.45	-1.05	0.127	0.26	3.05	0.47	-0.31	0.351	-0.36	2.62	1.31	-1.13
a0509a	55	-0.003	1.000	0.204	0.20	2.98	0.78	-0.65	0.041	-0.52	6.21	0.14	-0.24	0.200	0.28	2.96	0.78	-0.60
a0509a	56	0.054	1.000	0.394	-0.17	2.36	1.02	-1.10	0.119	0.05	3.71	0.49	-0.49	0.375	-0.48	2.55	0.90	-1.22
a0509a	57	-0.025	1.000	0.379	-0.08	8.05	2.98	-3.07	0.091	-1.60	8.06	0.25	-0.55	0.366	0.28	6.98	2.80	-2.84
a0509a	58	0.002	1.000	0.467	0.08	5.75	3.84	-2.88	0.129	-0.35	3.26	0.34	-0.45	0.447	0.05	5.59	3.67	-2.59
a0509a	27	0.006	1.000	0.075	0.24	3.04	0.31	-0.29	0.026	-0.36	3.77	0.08	-0.10	0.070	0.36	3.07	0.31	-0.21
a0509a	28	0.052	1.000	0.383	-0.01	2.09	0.99	-0.88	0.144	0.44	2.84	0.52	-0.28	0.354	-0.45	2.26	0.72	-1.00
a0509a	29	-0.004	1.000	0.173	0.36	2.96	0.58	-0.75	0.042	0.24	4.37	0.16	-0.16	0.167	0.49	2.99	0.61	-0.60
a0509a	30	0.079	1.000	0.426	-0.11	2.29	1.15	-1.08	0.157	0.51	2.96	0.64	-0.26	0.395	-0.56	2.51	0.93	-1.25
a0509a	33	-0.025	0.819	0.186	0.61	4.37	1.45	-1.00	0.042	0.28	4.34	0.16	-0.18	0.179	0.55	4.10	1.37	-0.90
a0509a	34	-0.035	0.819	0.292	0.05	4.55	2.37	-1.83	0.091	0.51	3.34	0.28	-0.29	0.272	-0.28	4.11	2.12	-1.87
a0509a	35	0.011	1.000	0.097	-0.24	10.51	0.68	-0.99	0.030	-0.72	6.95	0.14	-0.17	0.092	-0.10	9.44	0.58	-0.95
a0509a	36	0.063	1.000	0.361	0.04	2.11	0.95	-0.82	0.128	0.41	3.18	0.54	-0.24	0.337	-0.37	2.26	0.70	-1.02
a0509a	37	-0.001	1.000	0.132	0.03	3.52	0.52	-0.73	0.036	-0.86	6.36	0.12	-0.20	0.127	0.22	3.49	0.51	-0.69
a0509a	38	0.054	1.000	0.386	-0.01	2.32	1.12	-0.94	0.137	0.65	3.55	0.61	-0.27	0.361	-0.43	2.40	0.77	-1.08
a0509a	39	0.000	1.000	0.193	0.07	3.16	0.74	-0.75	0.039	-0.28	4.08	0.16	-0.17	0.189	0.20	3.17	0.76	-0.72
a0509a	40	0.056	1.000	0.386	-0.16	2.44	1.63	-1.08	0.123	0.53	3.41	0.55	-0.25	0.365	-0.43	2.51	1.45	-1.13
a0509a	41	-0.023	0.854	0.205	-0.06	3.32	0.67	-1.34	0.038	-0.48	4.17	0.10	-0.19	0.200	-0.02	3.09	0.64	-1.15
a0509a	42	0.009	0.854	0.191	0.34	4.25	1.24	-0.91	0.070	0.39	3.32	0.25	-0.21	0.174	0.04	3.68	1.21	-0.78
a0509a	43	0.003	1.000	0.050	0.01	3.13	0.20	-0.71	0.019	-0.86	10.89	0.08	-0.12	0.046	0.16	3.03	0.21	-0.15
a0509a	44	0.035	1.000	0.365	0.09	2.31	1.06	-0.5	0.113	0.39	2.69	0.41	-0.23	0.347	-0.28	2.33	0.78	-1.03
a0509a	45	-0.005	1.000	0.128	-0.04	2.90	0.40	-0.51	0.026	-0.75	8.82	0.13	-0.13	0.125	0.12	2.79	0.45	-0.40
a0509a	46	0.047	1.000	0.343	0.05	2.39	1.05	-0.87	0.105	0.39	2.63	0.39	-0.19	0.326	-0.31	2.46	0.73	-1.04
a0509a	47	0.000	1.000	0.235	0.12	2.86	0.88	-0.75	0.040	-0.24	4.72	0.17	-0.16	0.231	0.22	2.89	0.89	-0.62
a0509a	48	0.059	1.000	0.395	-0.10	2.54	1.20	-1.17	0.100	0.25	2.63	0.43	-0.18	0.382	-0.37	2.64	0.91	-1.32
a0509a	49	0.008	0.796	0.330	0.27	3.34	1.84	-1.35	0.035	-0.14	5.39	0.17	-0.14	0.328	0.25	3.31	1.92	-1.28
a0509a	50	-0.096	0.796	0.369	-0.47	3.24	1.25	-2.04	0.127	0.01	2.84	0.25	-0.49	0.339	-0.52	2.69	1.34	-1.56
a0509a	59	0.004	1.000	0.205	1.15	23.26	0.96	-0.37	0.012	0.13	5.01	0.06	-0.05	0.050	1.04	20.36	0.90	-0.36
a0509a	60	0.019	1.000	0.245	0.20	2.66	0.88	-0.71	0.060	0.37	3.69	0.26	-0.16	0.238	-0.13	2.60	0.69	-0.88
a0509a	61	0.003	1.000	0.137	0.11	3.14	0.50	-0.66	0.058	0.42	5.53	0.32	-0.17	0.123	0.21	3.09	0.47	-0.55
a0509a	62	0.118	1.000	0.432	-0.07	2.34	1.50	-1.12	0.200	0.69	3.52	0.98	-0.33	0.382	-0.55	2.38	0.87	-1.33
a0509a	63	-0.033	0.892	0.214	0.45	3.57	1.37	-1.09	0.050	-0.04	3.28	0.12	-0.19	0.207	0.53	3.55	1.28	-0.93
a0509a	64	0.028	0.892	0.404	-0.20	2.80	1.31	-1.45	0.138	0.92	4.32	0.70	-0.27	0.374	-0.55	2.76	1.23	-1.55
a0510a	51	0.005	1.000	0.063	0.19	3.45	0.28	-0.45	0.019	0.10	4.79	0.10	-0.08	0.059	0.28	3.21	0.29	-0.42
a0510a	52	0.060	1.000	0.360	0.04	2.28	1.16	-0.90	0.120	0.82	4.64	0.73	-0.28	0.339	-0.37	2.32	0.69	-1.02
a0510a	53	-0.001	1.000	0.121	0.24	2.93	0.54	-0.36	0.025	-0.02	3.89	0.09	-0.09	0.118	0.25	2.84	0.48	-0.34
a0510a	54	0.057	1.000	0.360	-0.05	2.33	1.00	-0.94	0.115	0.48	3.44	0.48	-0.28	0.340	-0.44	2.46	0.79	-1.08
a0510a	55	0.002	1.000	0.198	0.31	2.95	0.79	-0.61	0.032	0.35	4.47	0.15	-0.11	0.195	0.33	2.89	0.75	-0.57
a0510a	56	0.060	1.000	0.387	-0.17	2.42	1.87	-1.17	0.109	0.28	3.20	0.44	-0.30	0.371	-0.51	2.65	1.67	-1.26
a0510a	57	-0.023	1.000	0.390	-0.35	10.01	3.01	-3.50	0.095	-1.45	8.76	0.42	-0.54	0.377	0.03	8.30	2.77	-3.14
a0510a	58	-0.001	1.000	0.218	-0.42	5.90	1.50	-1.79	0.061	-0.54	4.51	0.21	-0.28	0.208	-0.32	4.99	1.30	-1.58
a0510a	27	0.006	1.000	0.077	0.20	3.07	0.35	-0.35	0.023	-0.31	3.32	0.07	-0.08	0.074	0.29	3.01	0.30	-0.32
a0510a	28	0.051	1.000	0.384	-0.10	2.20	1.10	-1.00	0.130	0.61	3.85	0.65	-0.33	0.361	-0.45	2.33	0.73	-1.05
a0510a	29	-0.005	1.000	0.176	0.38	3.00	0.66	-0.80	0.037	0.06	4.91	0.14	-0.18	0.172	0.52	3.09	0.69	-0.74
a0510a	30	0.059	1.000	0.421	-0.18	2.43	1.33	-1.32	0.141	0.59	3.52	0.63	-0.35	0.395	-0.56	2.60	0.93	-1.37
a0510a	33	-0.034	0.816	0.193	0.45	5.07	2.06	-1.51	0.044	-0.33	3.88	0.15	-0.23	0.186	0.40	4.44	1.91	-1.28
a0510a	34	-0.042	0.816	0.292	-0.19	3.90	2.00	-1.84	0.088	0.51	3.87	0.36	-0.29	0.274	-0.41	3.61	2.00	-1.59
a0510a	35	0.024	1.000	0.092	-0.24	9.30	0.72	-1.33	0.027	-0.13	4.96	0.16	-0.14	0.087	-0.17	7.84	0.58	-1.20
a0510a	36	0.063	1.000	0.362	0.00	2.19	1.23	-0.94	0.117	0.73	5.18	0.82	-0.29	0.343	-0.36	2.30	0.71	-0.99
a0510a	37	0.001	1.000	0.125	0.14	3.03	0.54	-0.64	0.030	-0.93	6.53	0.10	-0.19	0.122	0.31	3.02	0.48	-0.54
a0510a	38	0.044	1.000	0.379	-0.04	2.34	1.28	-1.00	0.122	0.75	4.75	0.79	-0.30	0.358	-0.43	2.46	0.78	-1.08
a0510a	39	-0.006	1.000	0.194	0.22	3.06	0.87	-0.79	0.035	-0.60	6.82	0.15	-0.22	0.190	0.31	3.00	0.78	-0.79
a0510a	40	0.052	1.000	0.385	-0.14	2.39	1.22	-1.13	0.112	0.41	3.28	0.51	-0.27	0.368	-0.44	2.50	0.95	-1.16
a0510a	41	-0.017	0.859	0.203	0.08	2.99	1.18	-0.74	0.035	0.11	3.18	0.12	-0.12	0.199	0.08	2.95	1.12	-0.67
a0510a	42	0.010	0.859	0.199	0.14	4.13	1.22	-0.99	0.067	0.22	3.53	0.23	-0.22	0.184	-0.04	3.52	1.18	-1.02
a0510a	43	0.006	1.000	0.049	0.18	3.20	0.19	-0.21	0.016	-1.15	11.65	0.06	-0.13	0.046	0.18	3.09	0.19	-0.19
a0510a	44	0.037	1.000	0.364	0.06	2.34	1.07	-0.99	0.109	0.65	3.91	0.47	-0.26	0.347	-0.29	2.36	0.82	-1.03
a0510a	45	-0.007	1.000	0.128	0.07	2.78	0.43	-0.47	0.025	-0.01	5.64	0.10	-0.11	0.126	0.14	2.76	0.45	-0.38
a0510a	46	0.049	1.000	0.338	0.02	2.44	0.99	-0.99	0.097	0.57	3.57	0.40	-0.22	0.323	-0.32	2.51	0.76	-1.03
a0510a	47	0.003	1.000	0.234	0.17	2.85	0.89	-0.70	0.036	0.41	4.47	0.18	-0.11	0.231	0.23	2.86	0.81	-0.64
a0510a	48	0.061	1.000	0.393	-0.10	2.54	1.11	-1.19	0.095	0.30	3.48	0.44	-0.24	0.382	-0.40	2.69	0.86	-1.30
a0510a	49	0.011	0.804	0.332	0.35	3.76	2.65	-1.58	0.034	0.18	7.62	0.19	-0.18	0.330	0.30	3.51	2.52	-1.46
a0510a	50	-0.085	0.804	0.362	-0.38													

# Appendix D

## SUPERTANK Swash Data

*by David L. Kriebel*

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### Tables of Sand Bed Elevations and Swash Data

Pages D2-D4 of this appendix provide sample listings of Tables D1 (Sand Bed Relative to Still Water Datum at Start of Test), D2 (Spectra Wave Parameters), and D3 (Time Series Wave Parameters). The bed elevation and wave parameters are defined in Chapter 4 of Volume I of this report. The swash gauge positions are given in Table D1. The full data tables are given in ASCII files TABLE\_D1, TABLE\_D2, and TABLE\_D3 on the enclosed diskettes.

Table D1

## Sand Bed Elevations Relative to Still Water Datum at Start of Test

X m	Gege	Z m	Z m	Z m	Z m	Z m	Z m	Z m	Z m	Z m	Z m
EROSION TESTS											
		A0509	A0510	A0512	A0515	A0517					
15.17	A	-.37	-.37	-.37	-.38	-.39					
13.34	B	-.21	-.20	-.24	-.24	-.27					
11.51	C	-.01	-.04	-.10	-.14	-.17					
10.60	J	.14	.04	.04	-.06	-.11					
9.69	D	.29	.14	.07	.02	-.04					
8.77	I	.40	.26	.21	.11	.05					
7.86	E	.50	.45	.40	.28	.17					
6.94	H	.58	.60	.60	.52	.39					
6.03	F	.69	.70	.70	.71	.70					
5.11	G	.82	.82	.82	.82	.82					
		A0608	A0609	A0611	A0613	A0615	A0617	A0618			
15.17	A	-.39	-.39	-.38	-.39	-.41	-.27	-.25			
13.34	B	-.29	-.29	-.30	-.32	-.30	-.15	-.18			
11.51	C	-.20	-.20	-.22	-.24	-.22	-.09	-.10			
10.60	J	-.13	-.15								
10.60	E							-.02			
9.69	D	-.06	-.09	-.10	-.11	-.13	.03	.03			
8.77	I	.01	.00	-.02	-.04	-.04	.09	.10			
7.86	J			.09	.06	.02	.16	.22			
7.86	E	.13	.12								
6.94	H	.32	.31	.28	.23	.19	.35	.36			
6.03	F	.69	.69	.64	.45	.46	.54	.53			
5.11	G	.82	.83	.83	.83	.78	.94	.94			
		A0709	A0710	A0711	A0713	A0715	A0717	A0719A	A0719B		
15.17	A			-.42	-.43	-.41	-.41				
13.34	B			-.34	-.34	-.36	-.36				
11.51	C			-.25	-.25	-.27	-.30				
9.69	D	no data	no data	-.15	-.16	-.17	-.20	no data	no data		
8.77	J			-.09	-.10	-.13	-.15				
7.86	E			.00	.00	-.05	-.09				
6.94	I			.17	.13	.08	.04				
6.03	F			.38	.29	.25	.22				
5.11	H			.77	.77	.77	.45				
4.20	G			1.09	1.09	1.09	1.09				
		A0808	A0809	A0812	A0814	A0815	A0816	A0817			
15.17	A	-.42	-.43	-.45	-.44	-.44	-.43	-.44			
13.34	B	-.38	-.38	-.38	-.35	-.35	-.36	-.32			
11.51	C	-.31	-.31	-.31	-.27	-.28	-.30	-.29			
9.69	D	-.20	-.22	-.24	-.15	-.17	-.18	-.19			
8.77	J	-.16	-.17	-.16	-.06	-.10	-.13	-.12			
7.86	E	-.11	-.11	.05	.00	-.02	-.06	-.07			
6.94	I	.01	-.01	.24	.09	.07	.04	-.01			
6.03	F	.18	.16	.33	.18	.19	.17	.14			
5.11	H	.38	.39	.36	.32	.32	.31	.33			
4.20	G	1.09	1.09	.37	.43	.45	.47	.48			
		A0908	A0910	A0911	A0912	A0914	A0915	A0916			
15.17	A	-.44	-.43	-.43	-.43	-.42	-.42				
13.34	B	-.31	-.36	-.37	-.37	-.38	-.36				
11.51	C	-.30	-.29	-.31	-.30	-.30	-.32				
9.69	D	-.19	-.22	-.23	-.24	-.24	-.22	no data			
8.77	J	-.13	-.19	-.20	-.18	-.19	-.19				
7.86	E	-.07	-.10	-.13	-.12	-.11	-.14				
6.94	I	-.01	.00	-.03	-.02	-.01	-.03				
6.03	F	.12	.14	.14	.12	.13	.12				
5.11	H	.33	.32	.31	.33	.29	.27				
4.20	G	.47	.49	.50	.50	.49	.49				

Table D2  
Spectral Wave Parameters

Run	Gage	$\eta$ m	$\sigma$ m	$H_{rms}$ m	$H_{ms}$ m	$T_p$ sec	$T_{m1}$ sec	$T_{m2}$ sec	$\sigma$ m	$H_{rms}$ m	$H_{ms}$ m	$T_p$ sec	$T_{m1}$ sec	$T_{m2}$ sec
a0509a	A	0.046	T 0.112	0.317	0.449	42.7	2.4	1.7						
			L 0.055	0.156	0.220	42.7	22.5	14.9	H 0.097	0.274	0.388	3.2	1.9	1.5
a0509a	B	0.065	T 0.092	0.261	0.369	36.6	3.1	1.9						
			L 0.061	0.172	0.243	36.6	24.4	17.0	H 0.068	0.194	0.274	3.2	1.8	1.4
a0509a	C	0.099	T 0.075	0.211	0.299	36.6	5.4	2.8						
			L 0.062	0.177	0.250	36.6	19.8	12.3	H 0.040	0.114	0.162	3.0	2.0	1.5
a0509a	J	0.064	T 0.062	0.176	0.248	36.6	6.7	3.2						
			L 0.055	0.157	0.222	36.6	17.3	13.4	H 0.027	0.075	0.107	2.9	1.8	1.4
a0509a	D	0.023	T 0.037	0.104	0.147	36.6	6.9	3.5						
			L 0.032	0.091	0.129	36.6	15.4	12.8	H 0.016	0.045	0.063	4.5	2.1	1.6
a0509a	I	0.007	T 0.019	0.054	0.077	36.6	6.5	3.5						
			L 0.016	0.046	0.065	36.6	15.7	12.4	H 0.009	0.026	0.037	4.4	2.3	1.7
a0509a	E	0.003	T 0.008	0.022	0.030	36.6	8.2	3.4						
			L 0.007	0.020	0.028	36.6	20.0	9.9	H 0.003	0.008	0.012	4.5	1.9	1.4
a0509a	H	0.001	T 0.005	0.015	0.021	42.7	7.3	3.3						
			L 0.005	0.013	0.019	42.7	18.3	14.5	H 0.002	0.006	0.009	5.3	2.0	1.4
a0509a	F	0.000	T 0.004	0.011	0.015	85.3	7.5	2.9						
			L 0.004	0.010	0.014	85.3	18.1	14.8	H 0.001	0.004	0.005	0.6	1.4	1.0
a0509a	G	0.001	T 0.002	0.006	0.009	256.0	4.9	1.9						
			L 0.002	0.006	0.008	256.0	43.2	15.5	H 0.001	0.003	0.004	0.6	1.1	0.8
a0510a	A	0.044	T 0.103	0.291	0.412	42.7	2.4	1.7						
			L 0.049	0.140	0.198	42.7	23.3	15.4	H 0.090	0.254	0.360	3.0	1.9	1.5
a0510a	B	0.058	T 0.087	0.245	0.347	42.7	3.0	1.9						
			L 0.053	0.149	0.211	42.7	26.0	16.7	H 0.068	0.191	0.271	3.2	1.9	1.5
a0510a	C	0.077	T 0.073	0.206	0.292	42.7	4.9	2.6						
			L 0.058	0.163	0.231	42.7	22.3	14.1	H 0.044	0.125	0.176	3.2	2.1	1.6
a0510a	J	0.076	T 0.068	0.193	0.273	42.7	6.5	3.2						
			L 0.060	0.168	0.238	42.7	18.7	12.7	H 0.032	0.091	0.129	3.2	2.0	1.6
a0510a	D	0.039	T 0.047	0.134	0.190	42.7	7.3	3.6						
			L 0.042	0.120	0.169	42.7	16.0	11.8	H 0.019	0.055	0.078	4.2	2.1	1.5
a0510a	I	0.012	T 0.025	0.071	0.101	42.7	6.6	3.6						
			L 0.021	0.059	0.084	42.7	15.1	11.8	H 0.013	0.036	0.050	4.7	2.6	1.9
a0510a	E	0.002	T 0.009	0.026	0.037	36.6	6.2	3.4						
			L 0.008	0.022	0.031	36.6	15.9	13.1	H 0.005	0.014	0.019	1	2.4	1.8
a0510a	H	0.000	T 0.004	0.010	0.014	51.2	7.9	3.1						
			L 0.003	0.009	0.013	51.2	17.6	14.5	H 0.001	0.004	0.005	9	1.6	1.1
a0510a	F	0.000	T 0.002	0.006	0.008	256.0	3.9	1.7						
			L 0.002	0.005	0.007	256.0	21.0	16.4	H 0.001	0.003	0.004	0.6	1.1	0.9
a0510a	G	0.000	T 0.000	0.000	0.000	0.0	0.0	0.0						
			L 0.000	0.000	0.000	0.0	0.0	0.0	H 0.000	0.000	0.000	0.0	0.0	0.0
a0512a	A	0.039	T 0.098	0.276	0.391	42.7	2.5	1.8						
			L 0.049	0.138	0.195	42.7	21.6	12.0	H 0.064	0.238	0.337	3.1	1.9	1.5
a0512a	B	0.054	T 0.086	0.244	0.345	42.7	3.2	2.0						
			L 0.055	0.155	0.220	42.7	23.0	14.7	H 0.065	0.185	0.262	3.1	1.9	1.5
a0512a	C	0.065	T 0.076	0.216	0.306	23.3	4.9	2.6						
			L 0.060	0.170	0.240	23.3	22.0	14.0	H 0.046	0.131	0.186	4.0	2.1	1.6
a0512a	J	0.089	T 0.075	0.212	0.300	23.3	5.9	3.0						
			L 0.066	0.178	0.252	23.3	19.5	14.1	H 0.040	0.112	0.159	3.1	2.1	1.6
a0512a	D	0.072	T 0.063	0.179	0.253	15.1	7.3	3.5						
			L 0.057	0.161	0.227	15.1	17.3	13.6	H 0.026	0.073	0.104	2.7	1.9	1.5
a0512a	I	0.028	T 0.040	0.14	0.162	15.1	7.0	3.6						
			L 0.035	0.099	0.140	15.1	15.7	12.9	H 0.018	0.051	0.073	4.9	2.3	1.7
a0512a		0.006	T 0.018	0.050	0.071	15.1	5.4	3.2						
			L 0.014	0.039	0.055	15.1	14.1	11.5	H 0.010	0.030	0.042	4.0	2.6	2.0
a0512a	H	0.001	T 0.004	0.012	0.018	23.3	4.2	2.5						
			L 0.003	0.009	0.013	23.3	15.1	12.6	H 0.003	0.008	0.011	3.4	2.1	1.6
a0512a	F	0.000	T 0.001	0.004	0.006	256.0	3.1	1.5						
			L 0.001	0.003	0.005	256.0	18.3	12.9	H 0.001	0.002	0.003	3.4	1.0	0.8
a0512a	G	0.000	T 0.000	0.001	0.002	0.6	0.7	0.6						
			L 0.000	0.000	0.000	0.0	0.0	0.0	H 0.000	0.000	0.002	0.6	0.6	0.6
a0515a	A	0.040	T 0.095	0.270	0.382	42.7	2.5	1.8						
			L 0.049	0.138	0.196	42.7	20.1	9.2	H 0.081	0.230	0.325	3.2	1.9	1.5
a0515a	B	0.052	T 0.087	0.247	0.347	42.7	3.1	2.0						
			L 0.055	0.155	0.219	42.7	21.8	11.1	H 0.067	0.198	0.267	3.2	2.0	1.6
a0515a	C	0.062	T 0.077	0.219	0.310	42.7	4.5	2.5						
			L 0.059	0.166	0.235	42.7	22.7	12.3	H 0.049	0.139	0.194	3.9	2.1	1.6



Table D3  
Time Series Wave Parameters

Run	Gage	$\bar{\eta}$ m	M	$\sigma$ m	$\mu_3$	$\mu_4$	$\bar{H}$ m	$\bar{T}$ sec	$H_{rms}$ m	$H_s$ m	$T_s$ sec	$H_{10}$ m	$T_{10}$ sec	$H_{max}$ m		
a0509a	A	0.045	T	397	0.112	0.739	3.31	9.31	2.70	0.32	0.42	3.1	0.40	3.2	0.70	
			L	51	0.054	0.169	2.49	0.13	21.10	0.14	0.21	33.5	0.25	31.0	0.26	
			H	399	0.097	0.760	3.06	0.30	2.70	0.32	0.41	2.9	0.47	2.8	0.56	
a0509a	B	0.065	T	360	0.092	0.358	4.00	0.21	2.80	0.23	0.32	3.9	0.40	4.1	0.56	
			L	44	0.061	0.273	2.63	0.15	23.30	0.16	0.23	30.2	0.28	34.8	0.30	
			H	406	0.068	0.753	3.70	0.20	2.50	0.22	0.30	2.8	0.38	2.8	0.50	
a0509a	C	0.099	T	246	0.075	0.838	3.43	0.14	4.20	0.16	0.24	6.8	0.32	9.0	0.42	
			L	55	0.063	0.461	2.61	0.15	18.70	0.17	0.23	26.6	0.25	32.0	0.22	
			H	435	0.040	0.448	3.59	0.10	2.30	0.12	0.17	2.9	0.22	2.9	0.32	
a0509a	J	0.064	T	189	0.062	1.286	4.63	0.10	5.50	0.13	0.20	9.9	0.30	14.6	0.42	
			L	64	0.056	0.950	3.30	0.13	16.00	0.14	0.20	23.2	0.23	28.8	0.27	
			H	451	0.027	0.623	7.35	0.06	2.20	0.08	0.11	2.6	0.16	2.6	0.37	
a0509a	D	0.023	T	156	0.037	2.473	11.43	0.06	6.70	0.08	0.12	9.5	0.19	14.2	0.29	
			L	60	0.032	2.062	8.60	0.07	17.10	0.09	0.13	21.7	0.16	24.1	0.22	
			H	294	0.016	0.118	8.30	0.04	3.30	0.05	0.07	3.0	0.10	3.1	0.14	
a0509a	I	0.007	T	84	0.019	4.823	35.68	0.05	13.10	0.06	0.09	16.7	0.13	25.6	0.24	
			L	47	0.016	3.990	25.99	0.04	22.00	0.05	0.07	29.6	0.10	33.3	0.17	
			H	158	0.009	0.941	17.97	0.03	6.20	0.04	0.06	4.9	0.08	3.5	0.15	
a0509a	E	0.003	T	23	0.008	4.637	37.61	0.03	44.60	0.04	0.06	37.8	0.08	32.5	0.11	
			L	20	0.007	3.647	22.02	0.03	51.70	0.03	0.02	18.9	0.02	17.0	0.07	
			H	59	0.003	2.797	82.64	0.02	15.70	0.02	0.03	10.7	0.04	3.3	0.08	
a0509a	H	0.001	T	11	0.005	9.032	100.58	0.04	71.80	0.04	0.00	0.0	0.00	0.0	0.09	
			L	10	0.005	8.579	96.08	0.02	158.60	0.02	0.00	0.0	0.00	0.0	0.07	
			H	26	0.002	1.793	68.21	0.02	34.20	0.02	0.02	28.2	0.02	2.4	0.04	
a0509a	F	0.000	T	1	0.004	15.442	260.59	0.04	27.70	0.06	0.00	0.0	0.00	0.0	0.08	
			L	2	0.004	14.342	220.92	0.02	128.00	0.03	0.00	0.0	0.00	0.0	0.06	
			H	5	0.001	-3.708	167.54	0.01	5.90	0.02	0.00	0.0	0.00	0.0	0.04	
a0509a	G	0.001	T	1	0.002	6.739	87.12	0.02	27.10	0.03	0.00	0.0	0.00	0.0	0.05	
			L	1	0.002	4.489	27.85	0.01	253.60	0.02	0.00	0.0	0.00	0.0	0.02	
			H	2	0.001	6.968	237.97	0.01	14.40	0.02	0.00	0.0	0.00	0.0	0.04	
a0510a	A	0.044	T	593	0.104	0.689	3.17	0.28	2.70	0.30	0.39	3.1	0.45	3.2	0.56	
			L	84	0.050	0.129	2.67	0.11	19.00	0.12	0.17	29.9	0.22	34.1	0.32	
			H	611	0.090	0.738	3.10	0.28	2.60	0.29	0.37	2.9	0.44	3.0	0.54	
a0510a	B	0.058	T	554	0.087	0.758	3.45	0.21	2.80	0.22	0.30	3.6	0.36	4.6	0.49	
			L	69	0.053	0.213	2.48	0.12	22.30	0.13	0.19	33.6	0.21	32.6	0.24	
			H	594	0.068	0.631	3.07	0.20	2.60	0.21	0.28	3.0	0.34	3.0	0.45	
a0510a	C	0.077	T	428	0.073	0.566	2.95	0.14	3.60	0.16	0.22	5.6	0.27	7.8	0.54	
			L	74	0.058	0.228	2.58	0.14	20.90	0.15	0.20	28.6	0.24	25.9	0.34	
			H	588	0.044	0.286	2.94	0.12	2.60	0.13	0.18	3.1	0.22	3.1	0.31	
a0510a	J	0.076	T	312	0.068	0.942	3.52	0.12	4.90	0.14	0.21	8.5	0.28	12.6	0.38	
			L	94	0.060	0.626	2.91	0.14	16.40	0.15	0.20	22.0	0.24	20.8	0.35	
			H	660	0.032	0.398	3.72	0.08	2.30	0.09	0.13	2.8	0.17	2.9	0.23	
a0510a	D	0.039	T	233	0.048	1.590	6.23	0.09	6.60	0.11	0.16	8.8	0.23	11.0	0.30	
			L	102	0.042	1.417	5.79	0.10	15.10	0.11	0.15	19.0	0.19	17.9	0.32	
			H	524	0.019	0.078	5.11	0.05	2.90	0.06	0.08	3.2	0.11	3.0	0.18	
a0510a	I	0.012	T	199	0.025	3.413	20.93	0.05	7.70	0.06	0.09	9.1	0.13	8.9	0.29	
			L	85	0.021	3.248	22.02	0.05	18.10	0.06	0.08	20.0	0.12	21.5	0.24	
			H	316	0.013	-0.207	6.79	0.04	4.70	0.04	0.07	4.2	0.09	3.8	0.12	
a0510a	E	0.002	T	50	0.009	7.975	91.53	0.04	32.70	0.05	0.07	29.5	0.11	35.5	0.16	
			L	50	0.008	7.479	88.89	0.02	32.00	0.03	0.04	39.5	0.07	22.4	0.13	
			H	104	0.005	1.756	32.31	0.02	13.40	0.03	0.04	16.5	0.06	6.7	0.09	
a0510a	H	0.000	T	7	0.004	13.185	208.84	0.03	148.10	0.04	0.00	0.0	0.00	0.0	0.08	
			L	8	0.003	11.963	170.49	0.02	235.40	0.02	0.00	0.0	0.00	0.0	0.06	
			H	20	0.001	1.186	171.87	0.01	64.50	0.02	0.01	0.7	0.01	0.4	0.04	
a0510a	F	0.000	T	2	0.002	13.431	237.90	0.03	205.50	0.04	0.00	0.0	0.00	0.0	0.05	
			L	2	0.002	11.867	162.70	0.02	264.40	0.02	0.00	0.0	0.00	0.0	0.03	
			H	6	0.001	3.170	179.08	0.01	75.10	0.02	0.00	0.0	0.00	0.0	0.03	
a0510a	G	0.000	T	0	0.000	0.000	0.00	0.00	0.00	0.00	0.0	0.00	0.0	0.00	0.00	
			L	0	0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.0	0.00	0.00
			H	0	0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.0	0.00	0.00
a0512a	A	0.039	T	967	0.098	0.657	3.16	0.26	2.70	0.28	0.36	3.2	0.42	3.4	0.58	
			L	135	0.049	0.191	2.77	0.11	19.80	0.12	0.17	30.7	0.21	39.3	0.24	0.51
			H	1003	0.084	0.664	3.00	0.25	2.60	0.27	0.35	2.9	0.41	3.0	0.51	0.51
a0512a	B	0.054	T	883	0.086	0.582	3.17	0.20	2.90	0.22	0.29	3.8	0.34	4.2	0.50	
			L	120	0.055	0.131	2.74	0.13	21.70	0.15	0.21	31.3	0.25	37.4	0.29	0.29
			H	993	0.065	0.455	2.81	0.19	2.60	0.20	0.27	3.0	0.31	3.0	0.51	0.51

# Appendix E

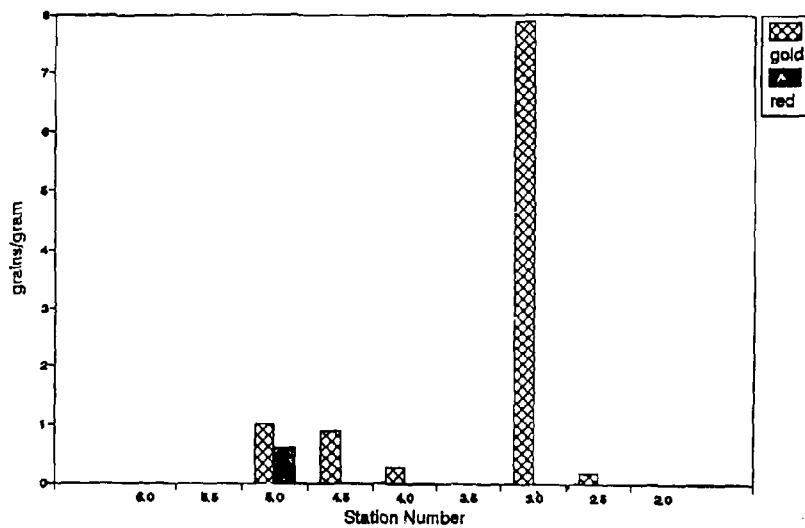
## SUPERTANK Sand Tracer Data

*by Paul D. Komar*

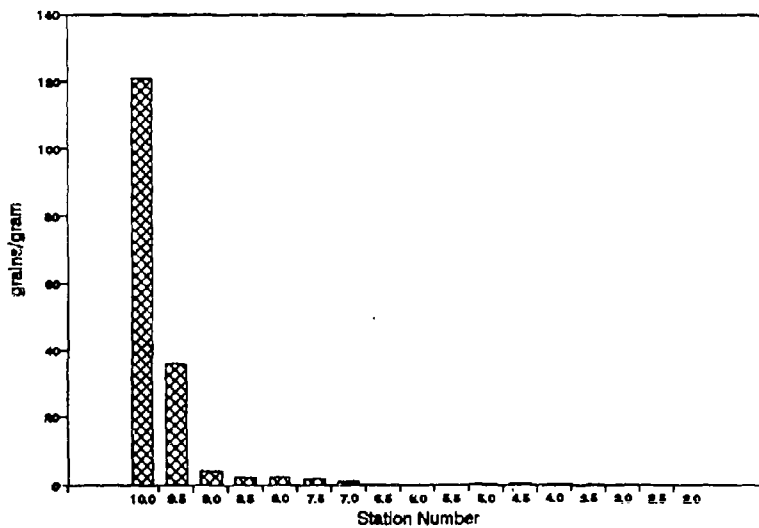
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This appendix contains the series of histograms resulting from tracer measurements of sand dispersion undertaken during the SUPERTANK experiments. Details of the collection and analyses of these data can be found in Chapter 5. The histograms are given in order of collection, indicated by the dates and sample runs printed on the graphs. The horizontal axes are the distances from the line injection position (0.0), with the distances given in meters and equal to the station number presented in the tabulated results in Chapter 5. Negative values are in the onshore direction from the injection position, positive values in the offshore direction. The vertical axes of the histograms give the numbers of tracer grains per gram of sand sample, representing the concentrations of tracer grains in the grid samples. For convenience of printing and to emphasize the tracer dispersion patterns, the vertical axes of the series of graphs are not all the same. In a few graphs the numbers along the vertical axis represent thousands of tracer grains, and is so indicated in the labeling of the axis.

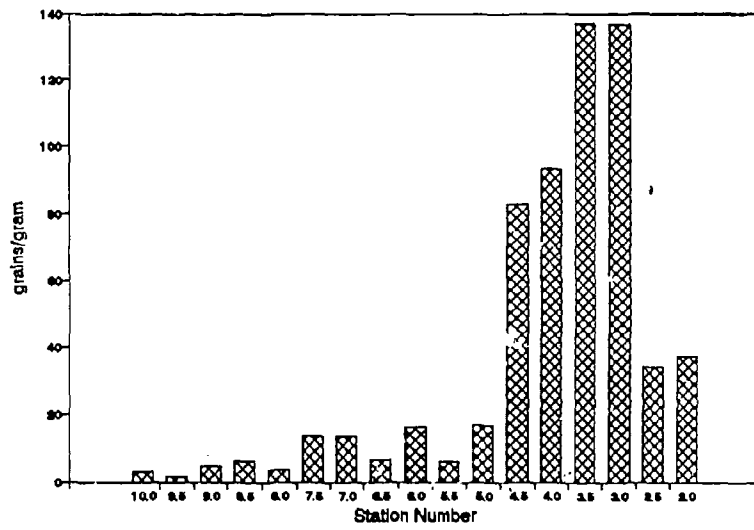
AUGUST 05  
10:30 AM



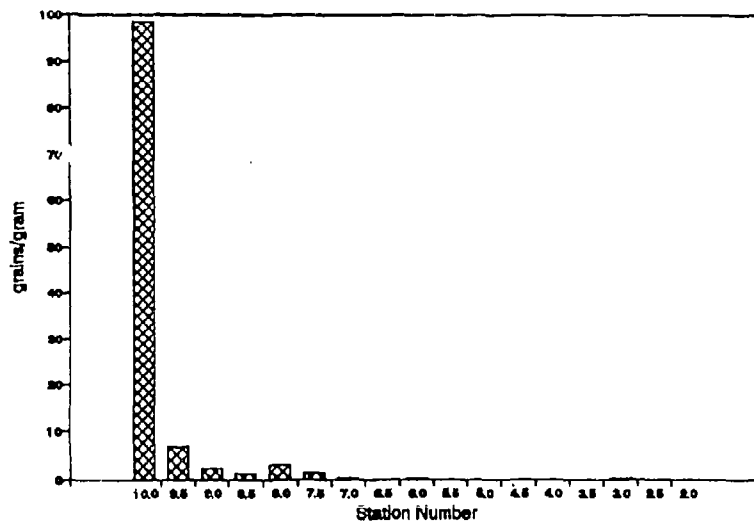
AUGUST 08  
12 A (GOLD)



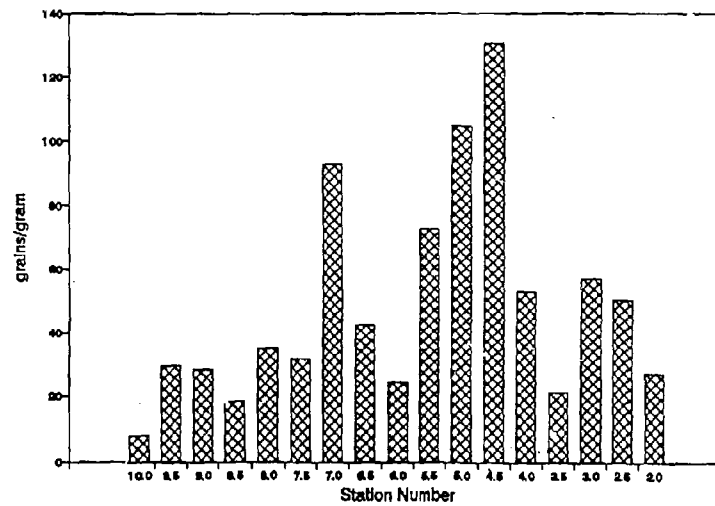
AUGUST 08  
12 A (RED)



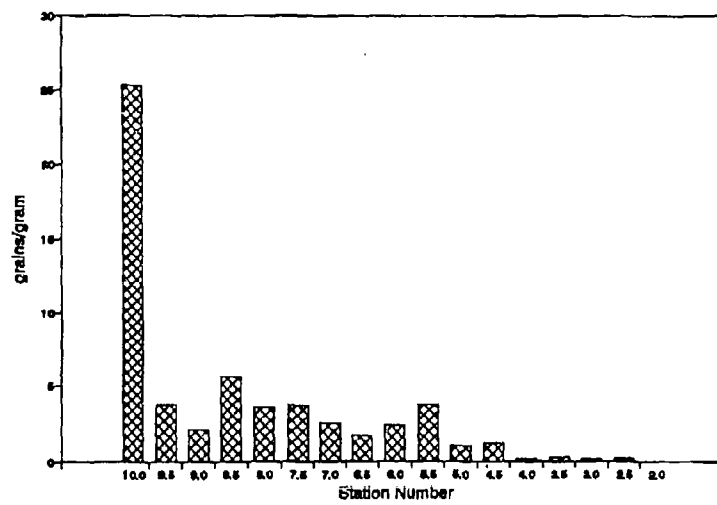
AUGUST 08  
14 A (GOLD)



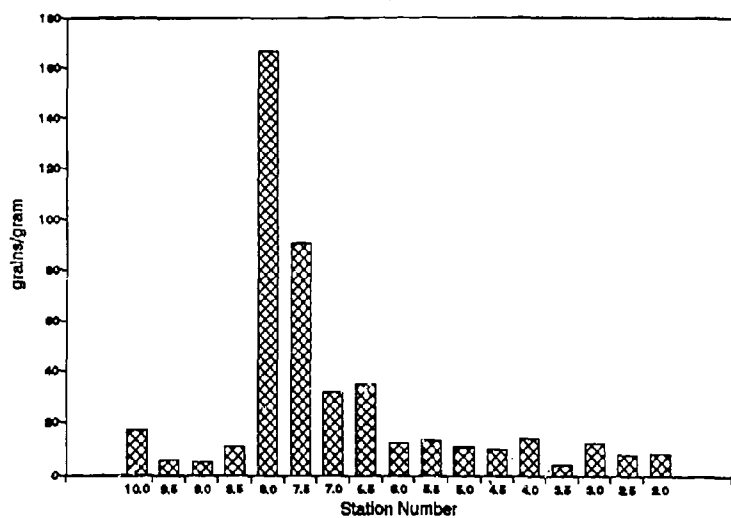
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14 A (RED)



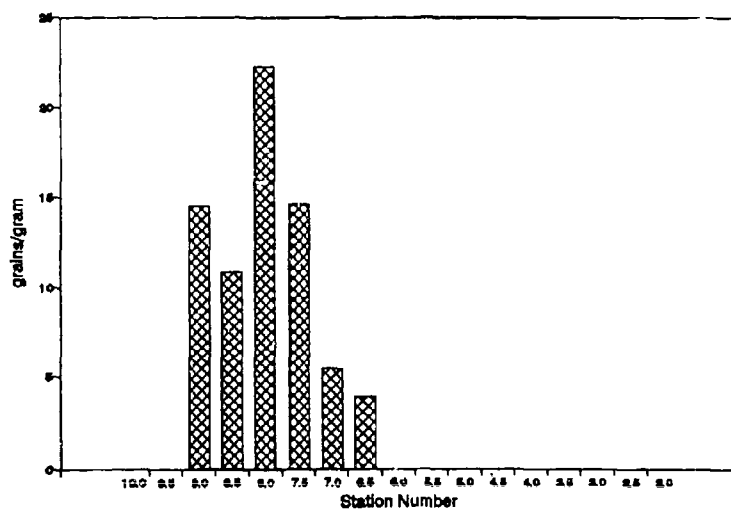
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10 A (GOLD)



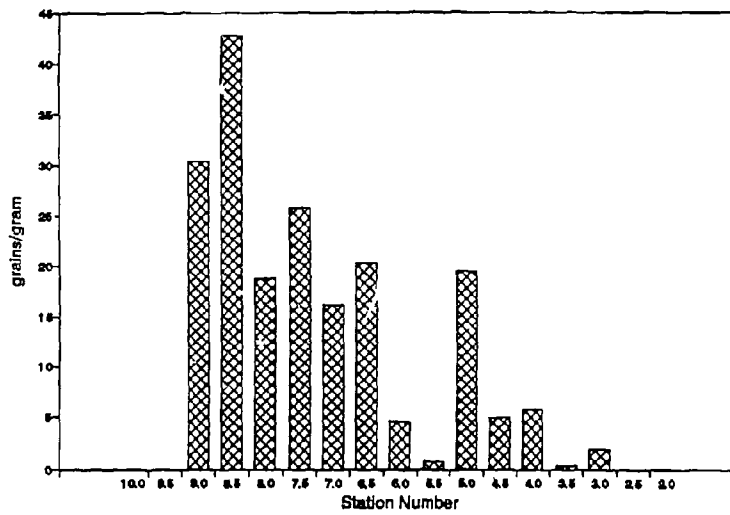
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10 A (RED)



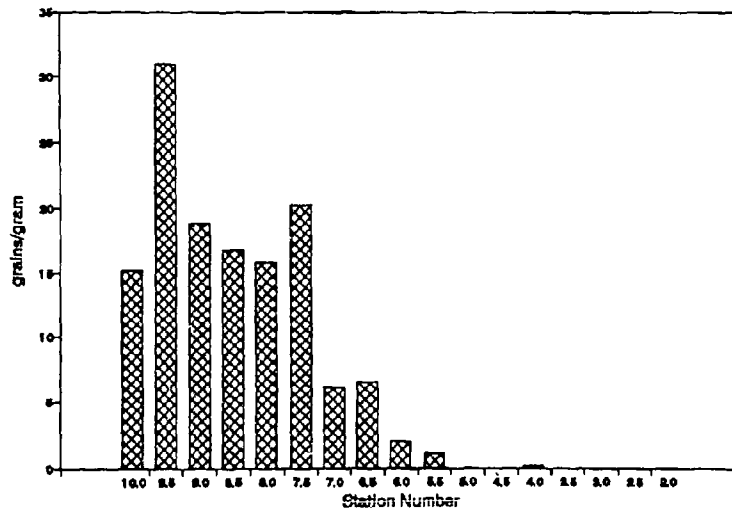
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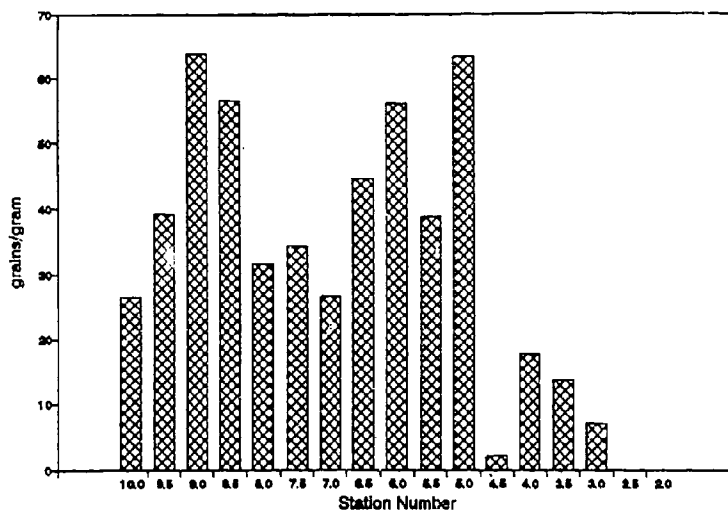
AUGUST 23  
9:18 (RED)



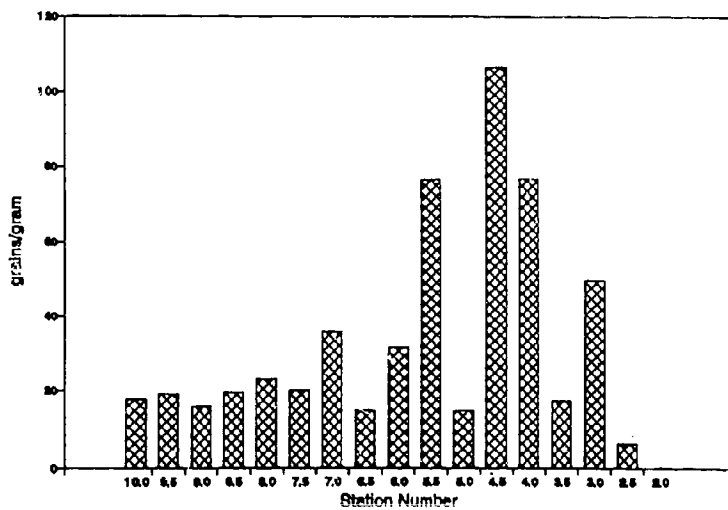
AUGUST 23  
10:00 (GOLD)



AUGUST 23  
10:00 (RED)

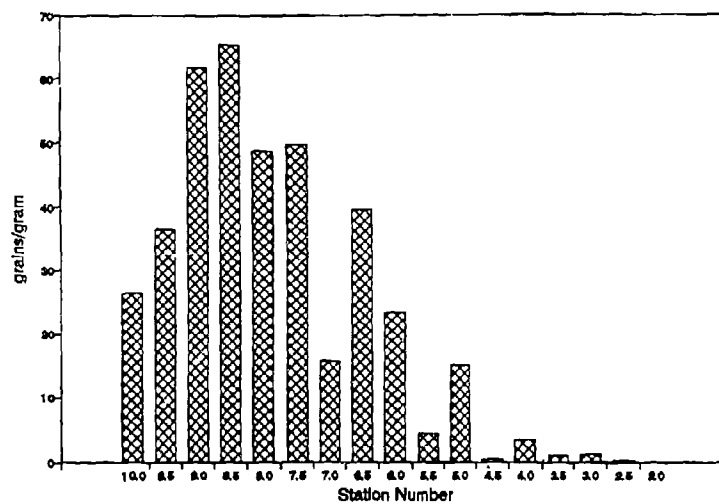


AUGUST 23  
11:25 (GOLD)

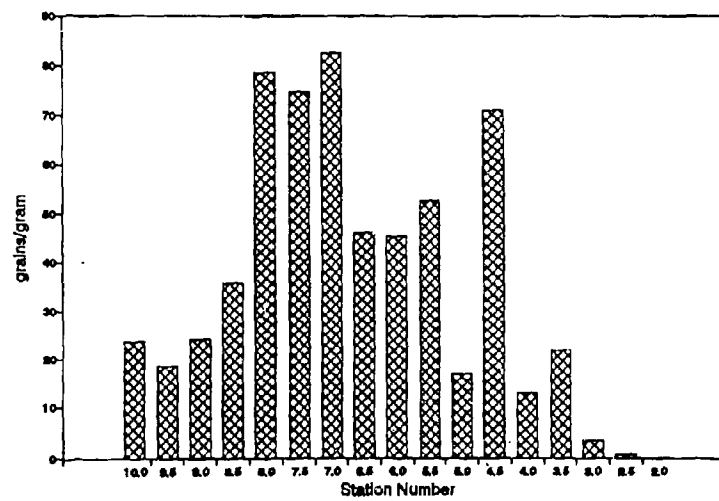




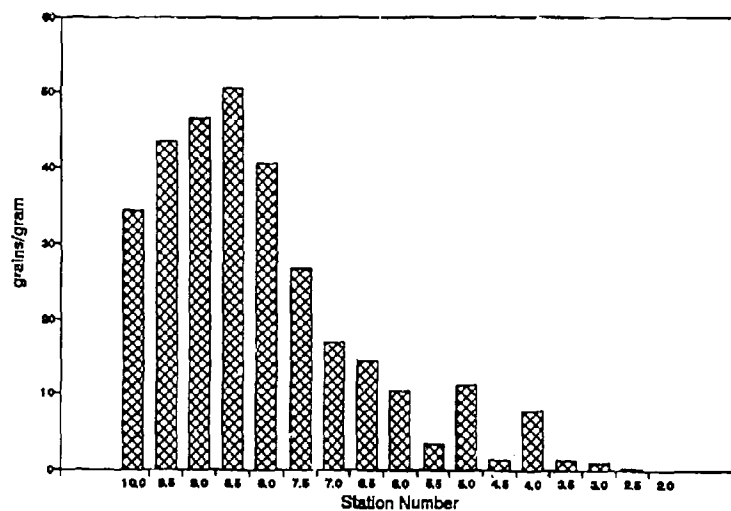
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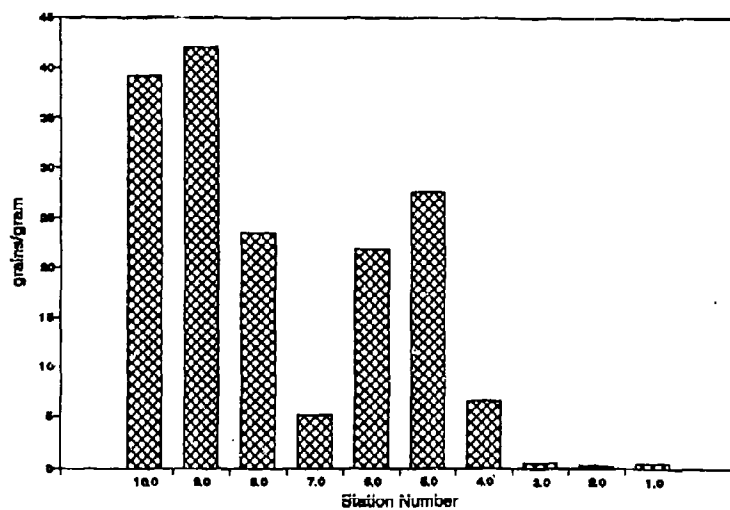
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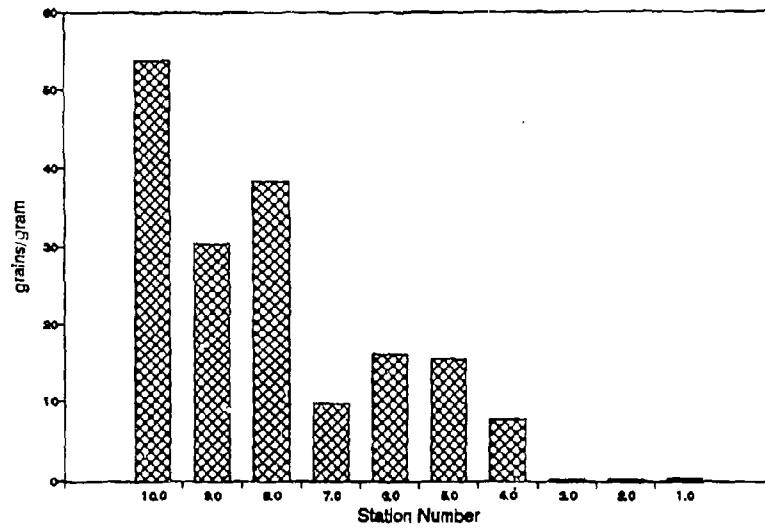
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12:10 (RED)



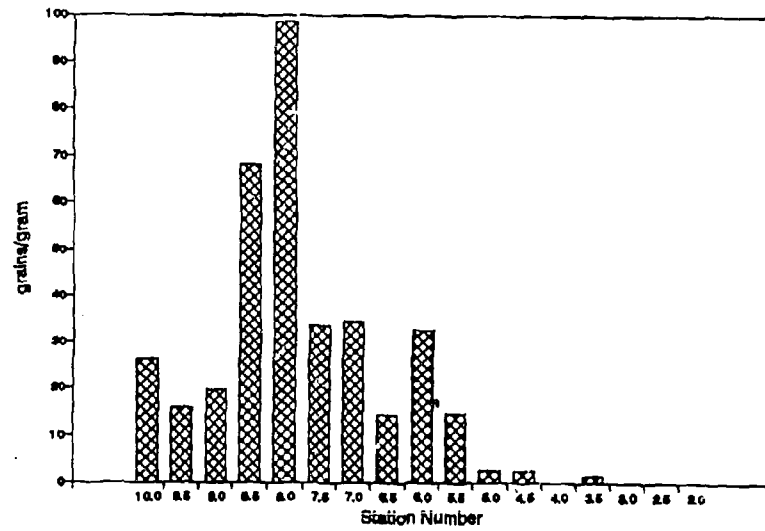
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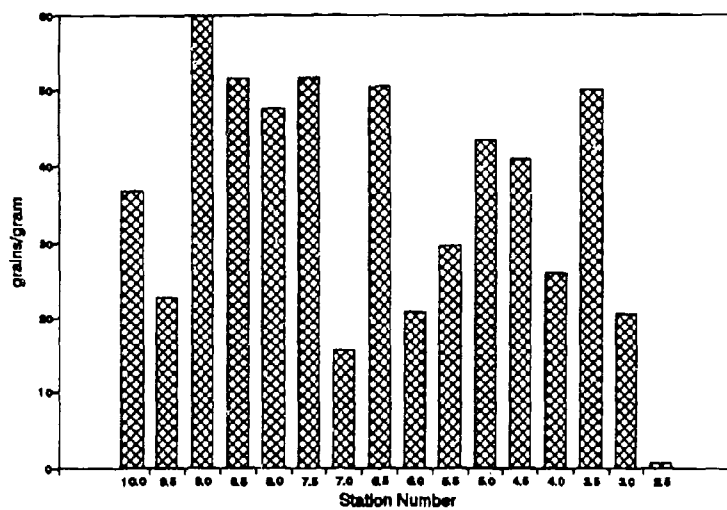
AUGUST 26  
13:45 (RED)



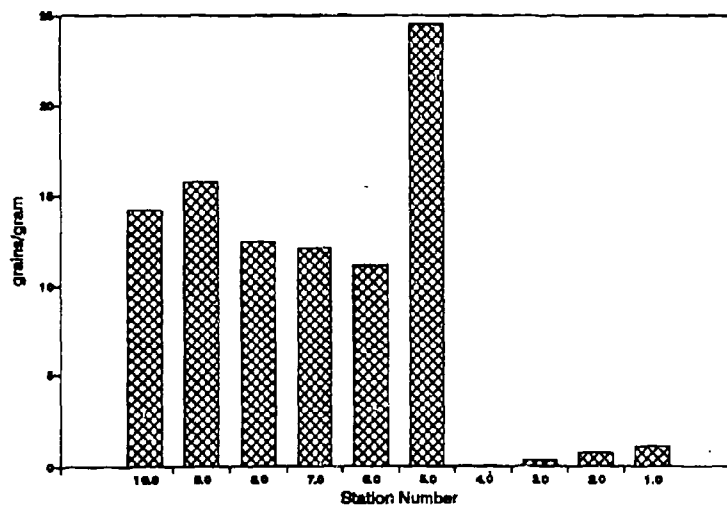
AUGUST 23  
14:10 (GOLD)



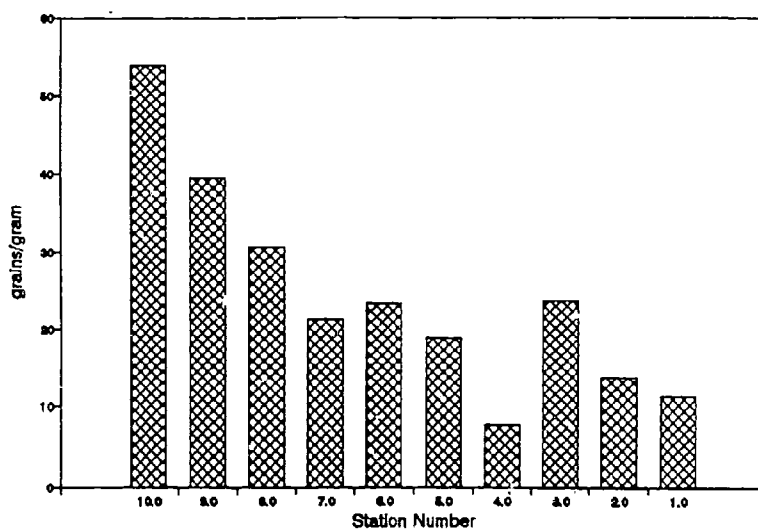
AUGUST 23  
14:10 (RED)



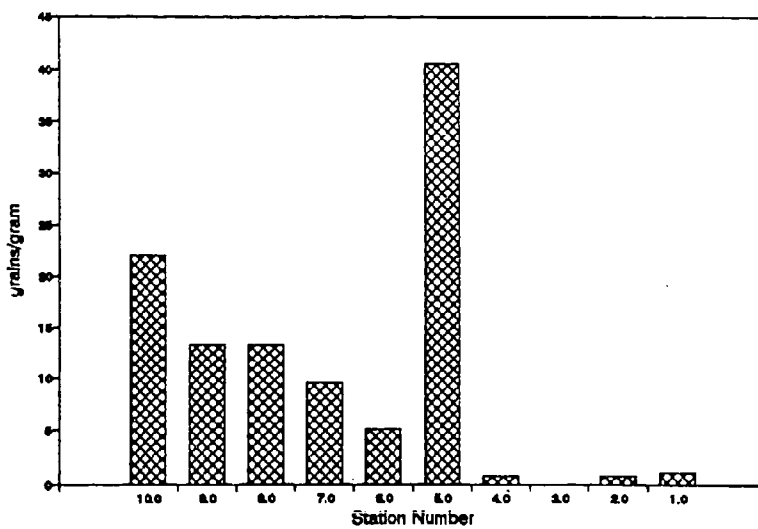
AUGUST 26  
18:00 (GOLD)



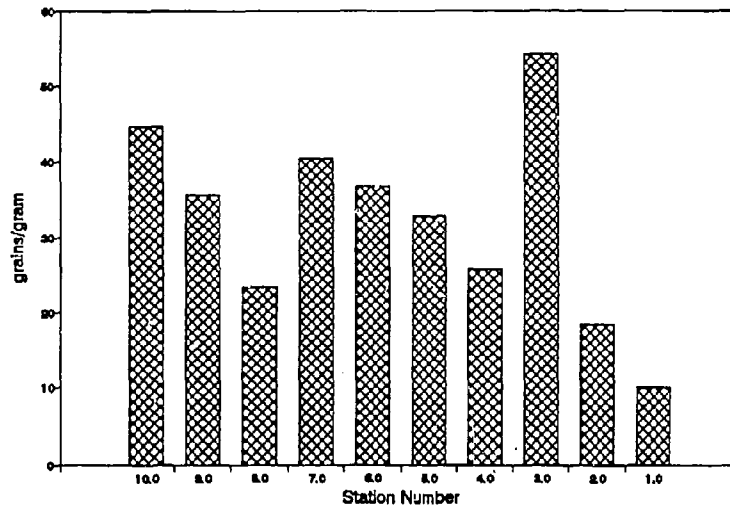
AUGUST 26  
18:00 (RED)



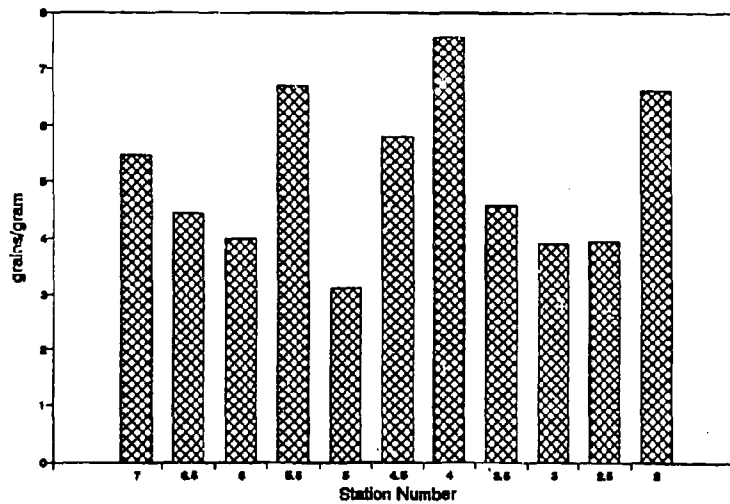
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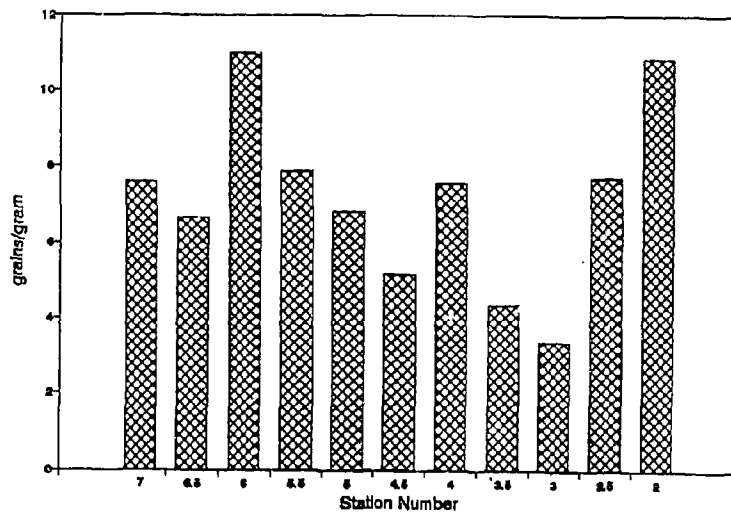
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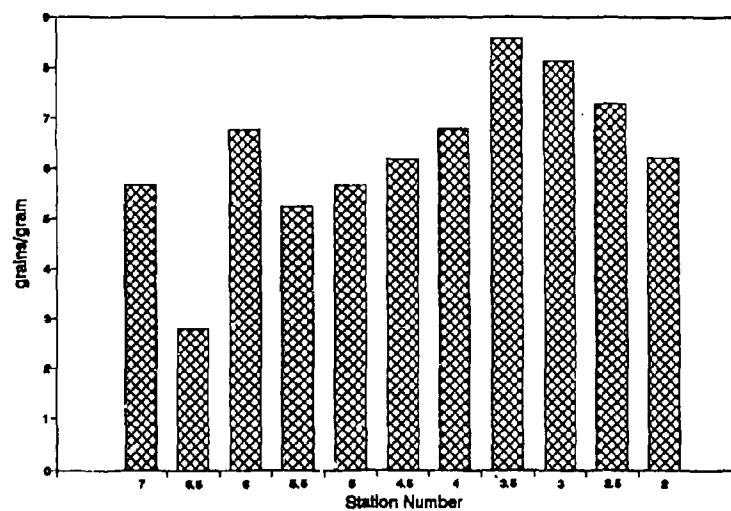
AUGUST 28  
10 A (GOLD)



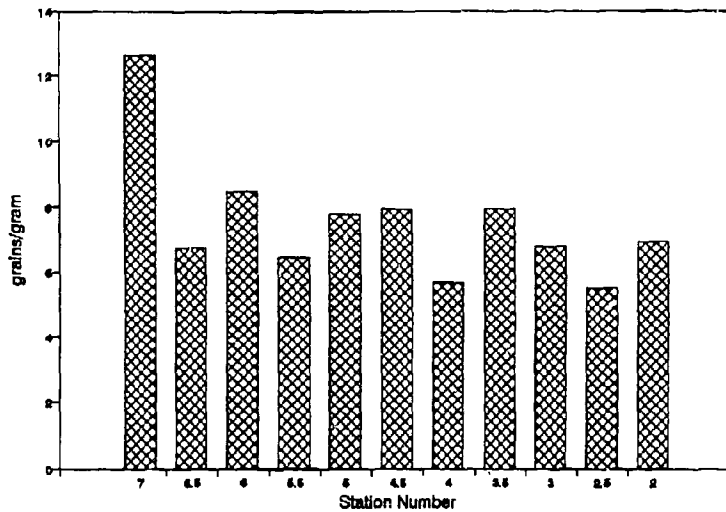
AUGUST 28  
10 A (RED)



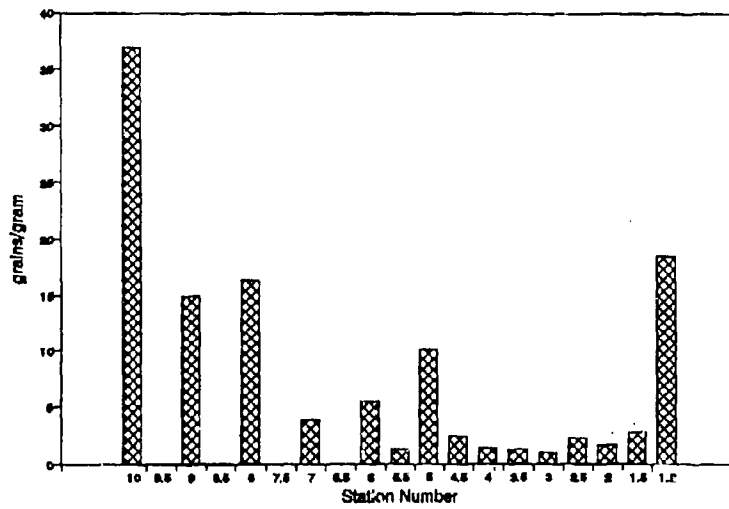
AUGUST 28  
11 A (GOLD)



AUGUST 28  
11 A (RED)

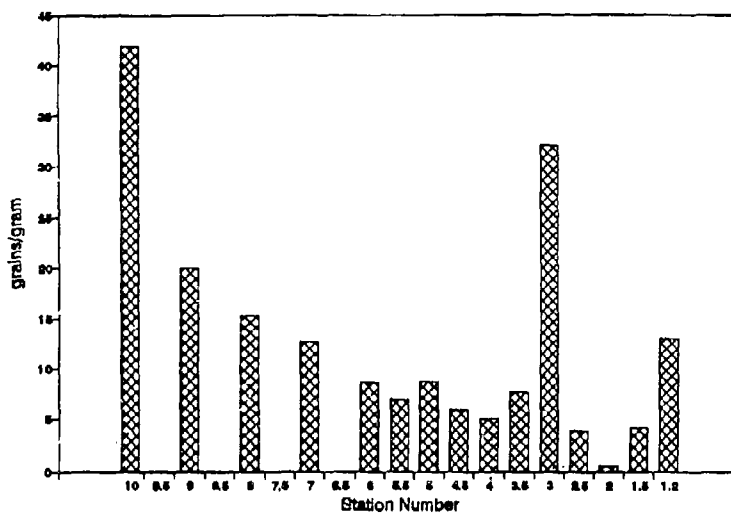


AUGUST 28  
16:50 (GOLD)

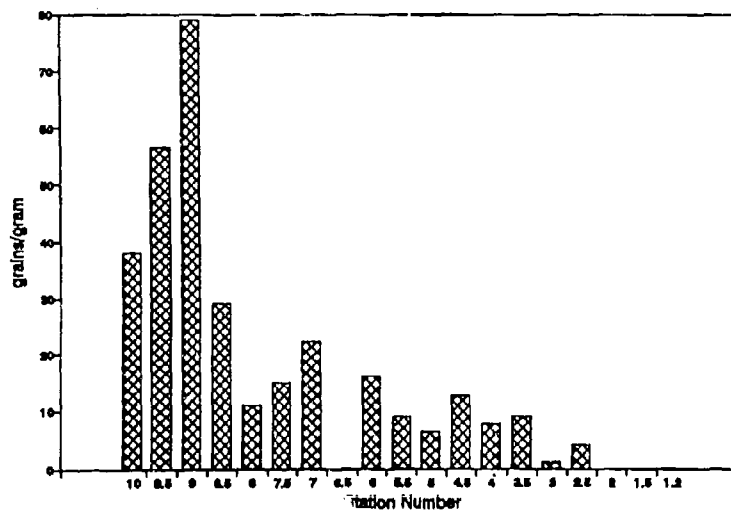




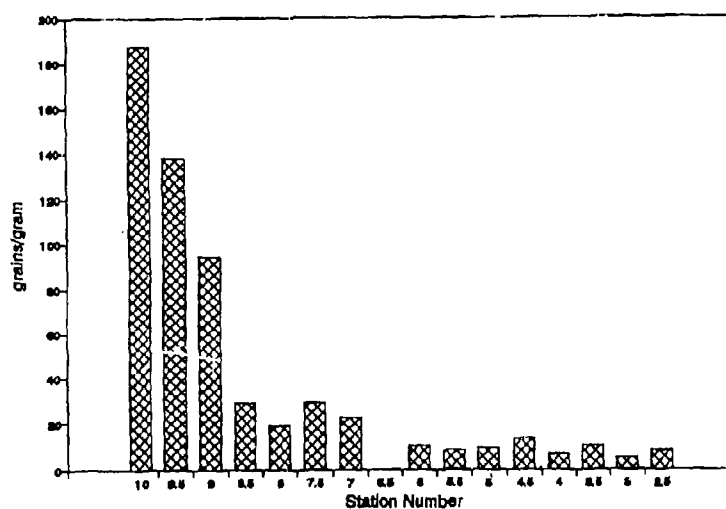
AUGUST 28  
16:50 (RED)



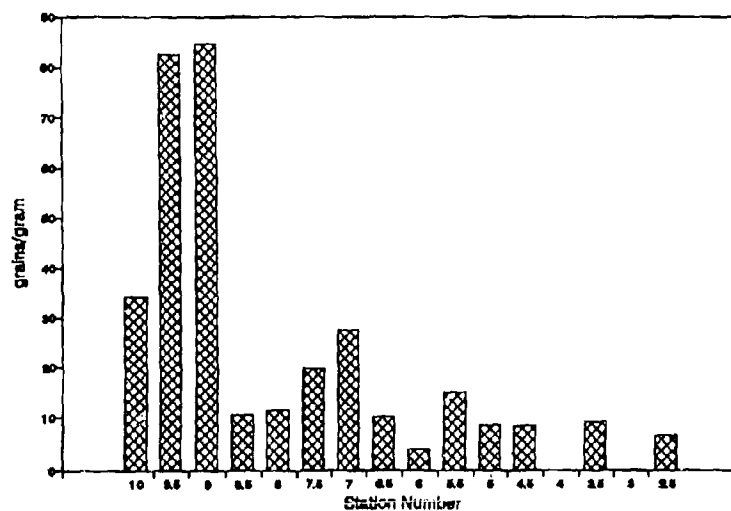
SEPTEMBER 05  
13 A (GOLD)



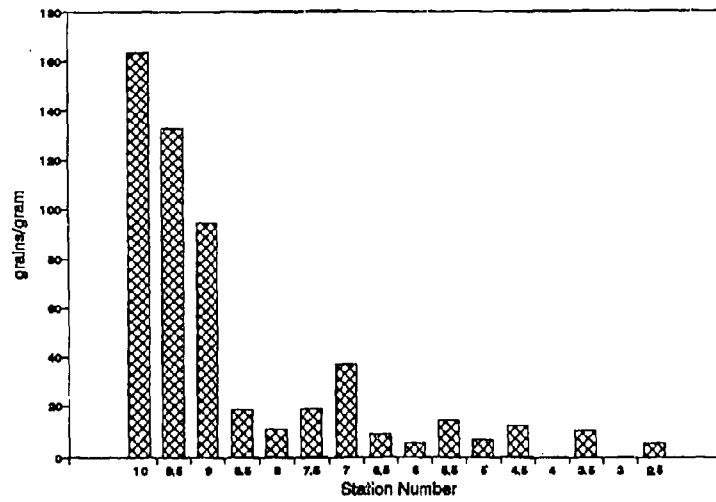
SEPTEMBER 05  
13 A (RED)



SEPTEMBER 05  
14 A (GOLD)



SEPTEMBER 05  
14 A (RED)



# Appendix F

## OBS Gain, Location and Statistics<sup>1</sup>

*by Reginald A. Beach*

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Appendix F summarizes the output of the fixed OBS data for all runs collected. OBS were located either on the east wall of the channel or near the center line. The first two columns of Table F1 identify the run number and sensor ID (chan), respectively. The subsequent 7 columns provide information concerning: sensor gain, sensor offset, cross-shore location, sensor elevation both before and after a test run, and the mean and standard deviation of sensor output for that run, respectively. Page F2 of this appendix provides a sample listing of Table F1 (OBS Gain, Location, and Statistics). The OBS parameters are defined in Chapter 6 of Volume I of this report. The full data table is given in the ASCII file TABLE\_F1 on an enclosed diskette.

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<sup>1</sup> A table of factors for converting non-SI units of measurement to SI units is presented on page vi.

Table F1

## OBS Gain, Location, and Statistics

Run	Chan	Gain g/l	Offset m/l	X ft	Za cm	Zb cm	Mean g/l	$\sigma$ g/l
a0509a	A01	7.73	-845	85.26	4.00	4.00	0.894	1.249
a0509a	A02	8.32	-847	85.26	7.00	7.00	1.010	0.898
a0509a	A03	8.16	-839	85.26	10.00	10.00	0.923	0.811
a0509a	A04	9.26	-835	85.26	15.00	15.00	1.087	0.968
a0509a	P01	9.02	1	85.26	40.00	40.00	0.841	0.518
a0509a	B01	6.29	-868	73.08	4.00	0.00	3.713	4.772
a0509a	B02	6.52	-872	73.08	7.00	3.00	3.354	3.835
a0509a	B03	8.55	-848	73.08	10.00	6.00	4.181	4.469
a0509a	B04	15.47	-820	73.08	15.00	11.00	6.620	6.753
a0509a	P02	8.38	-7	73.08	40.00	36.00	2.390	3.278
a0509a	C01	7.45	-924	97.44	3.50	3.50	1.591	3.060
a0509a	C02	7.93	-941	97.44	6.50	6.50	1.058	1.692
a0509a	C03	8.94	-934	97.44	9.50	9.50	0.929	1.399
a0509a	C04	86.61	-940	97.44	14.50	14.50	7.051	16.915
a0509a	P03	9.69	-28	97.44	29.50	29.50	0.528	0.328
a0509a	AM1	33.91	35	219.24	4.00	4.00	2.238	4.491
a0509a	AM2	105.76	23	219.24	6.25	6.25	0.849	1.175
a0509a	AM3	68.84	23	219.24	9.25	9.25	0.475	0.677
a0509a	AM4	55.00	20	219.24	23.75	23.75	0.363	0.522
a0509a	AM5	41.80	59	219.24	67.75	67.75	0.338	0.516
a0509a	BM1	71.27	86	133.98	3.50	3.50	1.279	1.490
a0509a	BM2	14.43	112	133.98	6.50	6.50	0.652	0.607
a0509a	BM3	7.99	107	133.98	9.50	9.50	0.380	0.342
a0509a	BM4	18.39	100	133.98	24.00	24.00	0.238	0.173
a0509a	BM5	7.58	99	133.98	68.50	68.50	0.144	0.098
a0510a	A01	7.73	-856	85.26	4.00	3.50	1.763	3.649
a0510a	A02	8.32	-822	85.26	7.00	6.50	1.344	2.262
a0510a	A03	8.16	-819	85.26	10.00	9.50	1.155	1.440
a0510a	A04	9.26	-813	85.26	15.00	14.50	1.171	1.428
a0510a	P01	9.02	25	85.26	40.00	39.50	0.471	0.350
a0510a	B01	6.29	-1029	73.08	4.00	-3.00	22.615	33.202
a0510a	B02	6.52	-1039	73.08	7.00	0.00	11.312	16.739
a0510a	B03	8.55	-1098	73.08	10.00	3.00	11.855	13.519
a0510a	B04	15.47	-1116	73.08	15.00	8.00	19.132	20.614
a0510a	P02	8.38	24	73.08	40.00	33.00	2.486	4.118
a0510a	C01	7.45	-922	97.44	3.50	4.50	4.783	8.441
a0510a	C02	7.93	-924	97.44	6.50	7.50	2.368	4.048
a0510a	C03	8.94	-916	97.44	9.50	10.50	1.812	2.754
a0510a	C04	86.61	-925	97.44	14.50	15.50	12.804	15.777
a0510a	P03	9.69	-8	97.44	29.50	30.50	0.706	0.308
a0510a	AM1	33.91	34	219.24	4.00	4.50	5.856	7.979
a0510a	AM2	105.76	23	219.24	6.25	6.75	1.091	1.452
a0510a	AM3	68.84	24	219.24	9.25	9.75	0.517	0.797
a0510a	AM4	55.00	20	219.24	23.75	24.25	0.516	0.665
a0510a	AM5	41.80	59	219.24	67.75	68.25	0.423	0.603
a0510a	BM1	71.27	87	133.98	3.50	2.00	1.482	2.257
a0510a	BM2	14.43	117	133.98	6.50	5.00	0.815	0.933
a0510a	BM3	7.99	113	133.98	9.50	8.00	0.530	0.507
a0510a	BM4	18.39	102	133.98	24.00	22.50	0.247	0.225
a0510a	BM5	7.58	104	133.98	68.50	67.00	0.212	0.146
a0512a	A01	7.73	-846	85.26	3.50	1.50	7.103	15.834
a0512a	A02	8.32	-823	85.26	6.50	4.50	2.715	6.324
a0512a	A03	8.16	-810	85.26	9.50	7.50	1.867	4.009
a0512a	A04	9.26	-814	85.26	14.50	12.50	1.525	2.840
a0512a	P01	9.02	32	85.26	39.50	37.50	0.417	0.682
a0512a	B01	6.29	-838	73.08	5.50	-0.50	28.379	31.894
a0512a	B02	6.52	-841	73.08	8.50	2.50	10.472	15.775
a0512a	B03	8.55	-816	73.08	11.50	5.50	9.617	14.112
a0512a	B04	15.47	-791	73.08	16.50	10.50	11.099	14.827
a0512a	P02	8.38	27	73.08	41.50	35.50	3.483	4.791
a0512a	C01	7.45	-906	97.44	4.50	2.50	5.407	10.891
a0512a	C02	7.93	-913	97.44	7.50	5.50	2.989	5.313
a0512a	C03	8.94	-912	97.44	10.50	8.50	1.864	3.693
a0512a	C04	86.61	-912	97.44	15.50	13.50	27.811	27.206
a0512a	P03	9.69	6	97.44	30.50	28.50	0.276	0.228
a0512a	AM1	33.91	37	219.24	4.50	4.50	0.821	1.195
a0512a	AM2	105.76	23	219.24	6.75	6.75	1.149	1.405
a0512a	AM3	68.84	23	219.24	9.75	9.75	0.680	0.812
a0512a	AM4	55.00	21	219.24	24.25	24.25	0.399	0.548

# Appendix G

## Mobile OBS Sensor Array Data<sup>1</sup>

*by Stephen F. Barkaszi*

The data contained in this appendix provide a compilation of the OBS sensor gain, offset, position, and sampled concentration data statistics for the instruments which were deployed from the mobile instrument carriage. These data are accompanied by other pertinent run information in the ledger files associated with each time series (see Table 7-4). Table G1 is a complete listing of all runs during which OBS sensor data were collected from the carriage.

Table G1 contains nine columns of data from 13 tests and 168 runs. Each row of the table presents information for an individual sensor in the mobile OBS array starting with the sensor closest to the bed, Sensor AAA. Subsequent rows display data for sensors at the next higher level in the vertical stack of five sensors.

The first column in the table is the run ID which identifies the data collection file by month (A = August, S = September), day of the month, hour (24-hour format, Pacific Daylight Time), and a letter to distinguish multiple runs during the same hour (A = first, B = second, etc.). The second column is a series of three characters labeling the OBS sensor data channel sampled during the data collection process. Columns three and four are gains and offsets determined from the calibration. Gain and offset values in Table G1 were constant throughout the SUPERTANK project. Columns five, six, and seven are respectively the offshore position, distance from the bed prior to wave activity for the specified run, and the distance from the bed at the end of the data collection run. The last two columns are the mean and standard deviation computed from the portion of the filtered time series collected while waves were generated.

Occasionally the pattern of five rows of sensor data per Run ID is not followed in Table G1. During the SUPERTANK test series ST\_B0, 33 OBS

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<sup>1</sup> A table of factors for converting non-SI units of measurement to SI units is presented on page vi.

sensors were deployed from the mobile instrument carriage in four vertical arrays. For the 22 runs during this test series, all of the sensors in the OBS matrix are listed. For Runs A1314A and A1317A, repeated listings of the same five sensors occur under the same run ID. During these two runs, the position of the OBS array was changed to measure the cross-shore profile of the suspended sediment response to regular waves in the outer surf zone. More detailed information about the data collection runs including the times during which data were collected can be found in the ledger files.

Table G1

## OBS Sensor Gain, Offset, Position, and Statistics

Run	Chan	Gain g/l	Offset g/l	X ft	Z <sub>1</sub> cm	Z <sub>2</sub> cm	Mean g/l	$\sigma$ g/l
A0509A	AAA	49.83	3.32	114.75	11.40	11.40	0.79	0.47
A0509A	BBB	16.81	-0.19	114.75	15.20	15.20	0.62	0.36
A0509A	CCC	16.00	0.08	114.75	19.00	19.00	0.54	0.33
A0509A	DDD	22.57	0.10	114.75	30.50	30.50	0.61	0.38
A0509A	EEE	16.38	-0.14	114.75	45.70	45.70	0.44	0.28
A0510A	AAA	49.83	3.32	114.81	11.40	10.20	0.73	0.66
A0510A	BBB	16.81	-0.19	114.81	15.20	14.00	0.56	0.50
A0510A	CCC	16.00	0.08	114.81	19.00	17.80	0.51	0.46
A0510A	DDD	22.57	0.10	114.81	30.50	29.30	0.46	0.43
A0510A	EEE	16.38	-0.14	114.81	45.70	44.50	0.25	0.25
A0512A	AAA	49.83	3.32	114.78	16.50	14.20	1.14	0.51
A0512A	BBB	16.81	-0.19	114.78	20.30	18.00	0.86	0.41
A0512A	CCC	16.00	0.08	114.78	24.10	21.80	0.78	0.39
A0512A	DDD	22.57	0.10	114.78	35.60	33.20	0.95	0.47
A0512A	EEE	16.38	-0.14	114.78	50.80	48.50	0.46	0.31
A0515A	AAA	49.83	3.32	114.77	14.00	13.00	0.44	0.63
A0515A	BBB	16.81	-0.19	114.77	17.80	16.80	0.30	0.53
A0515A	CCC	16.00	0.08	114.77	21.60	20.60	0.24	0.52
A0515A	DDD	22.57	0.10	114.77	33.00	32.00	0.26	0.55
A0515A	EEE	16.38	-0.14	114.77	48.30	47.20	0.17	0.37
A0608A	AAA	49.83	3.32	114.88	7.60	9.10	0.97	1.02
A0608A	BBB	16.81	-0.19	114.88	11.40	13.00	0.67	0.61
A0608A	CCC	16.00	0.08	114.88	15.20	16.80	0.58	0.47
A0608A	DDD	22.57	0.10	114.88	26.70	28.20	0.54	0.38
A0608A	EEE	16.38	-0.14	114.88	41.90	43.40	0.33	0.28
A0609A	AAA	49.83	3.32	114.83	7.00	8.40	1.38	1.51
A0609A	BBB	16.81	-0.19	114.83	10.80	12.20	0.82	0.77
A0609A	CCC	16.00	0.08	114.83	14.60	16.00	0.56	0.63
A0609A	DDD	22.57	0.10	114.83	26.00	27.40	0.60	0.51
A0609A	EEE	16.38	-0.14	114.83	41.30	42.70	0.21	0.31
A0611A	AAA	49.83	3.32	114.85	7.00	8.10	1.13	1.12
A0611A	BBB	16.81	-0.19	114.85	10.80	11.90	0.74	0.62
A0611A	CCC	16.00	0.08	114.85	14.60	15.70	0.55	0.46
A0611A	DDD	22.57	0.10	114.85	26.00	27.10	0.57	0.48
A0611A	EEE	16.38	-0.14	114.85	41.30	42.40	0.33	0.23
A0615A	AAA	49.83	3.32	114.67	7.60	4.40	3.83	3.77
A0615A	BBB	16.81	-0.19	114.67	11.40	8.30	2.22	1.93
A0615A	CCC	16.00	0.08	114.67	15.20	12.10	1.67	1.47
A0615A	DDD	22.57	0.10	114.67	26.70	23.50	1.20	0.73
A0615A	EEE	16.38	-0.14	114.67	41.90	38.70	0.63	0.35
A0617A	AAA	49.83	3.32	114.96	11.40	9.90	1.19	1.24
A0617A	BBB	16.81	-0.19	114.96	15.20	13.70	0.95	0.87
A0617A	CCC	16.00	0.08	114.96	19.00	17.50	0.75	0.65
A0617A	DDD	22.57	0.10	114.96	30.50	29.00	0.88	0.69
A0617A	EEE	16.38	-0.14	114.96	45.70	44.20	0.43	0.32
A0618A	AAA	49.83	3.32	114.90	9.50	9.90	1.02	1.08
A0618A	BBB	16.81	-0.19	114.90	13.30	13.70	0.83	0.79
A0618A	CCC	16.00	0.08	114.90	17.10	17.50	0.74	0.73
A0618A	DDD	22.57	0.10	114.90	28.60	29.00	0.69	0.79
A0618A	EEE	16.38	-0.14	114.90	43.80	44.20	0.44	0.41
A0710A	AAA	49.83	3.32	117.79	9.50	9.60	0.56	1.19
A0710A	BBB	16.81	-0.19	117.79	13.30	13.40	0.50	0.97
A0710A	CCC	16.00	0.08	117.79	17.10	17.20	0.20	0.82
A0710A	DDD	22.57	0.10	117.79	28.60	28.70	0.50	1.17
A0710A	EEE	16.38	-0.14	117.79	43.80	43.90	0.29	0.76
A0711A	AAA	49.83	3.32	112.85	8.40	25.10	0.95	1.24
A0711A	BBB	16.81	-0.19	112.85	12.20	29.00	0.75	0.94
A0711A	CCC	16.00	0.08	112.85	16.00	32.80	0.63	0.86
A0711A	DDD	22.57	0.10	112.85	27.40	44.20	0.61	0.88
A0711A	EEE	16.38	-0.14	112.85	42.70	59.40	0.38	0.62
A0713A	AAA	49.83	3.32	113.69	9.50	9.60	1.12	1.38
A0713A	BBB	16.81	-0.19	113.69	13.30	13.40	0.94	1.25
A0713A	CCC	16.00	0.08	113.69	17.10	17.20	0.81	1.22
A0713A	DDD	22.57	0.10	113.69	28.60	28.70	0.91	1.23
A0713A	EEE	16.38	-0.14	113.69	43.80	43.90	0.55	0.84
A0715A	AAA	49.83	3.32	116.38	8.90	8.40	3.73	2.25
A0715A	BBB	16.81	-0.19	116.38	12.70	12.20	165.02	21.01
A0715A	CCC	16.00	0.08	116.38	16.50	16.00	156.62	20.18



# Appendix H

## Acoustic-Doppler Current Profiler Data

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### Data Files

#### Naming conventions

The file names follow the SUPERTANK convention and are differentiated by use of extensions. The basic convention is as follows:

A	0	5	1	2	A	R	6	.	E	XT
-	-	-	-	-	-	-	-	-	-	-
1	2	3	4	5	6	7	8		a	bc

- 1 - Month (August or September).
- 2,3 - Day of month.
- 4,5 - Hour of day (24 hr clock).
- 6 - Wave run during hour (valid for entire channel).
- 7,8 - System identifier - R6 is for RD Flow 600 kHz, R2 for 2.4 MHz.

EXT - the file extensions follow different conventions for each system.

**Instrument 1.** There are two file extensions for 2.4-MHz system data. For rapidly acquired and recorded data (single-ping data), files have the extension '.C00' where C is for continuous data and 00 is file sequence number within a particular run. For data ensembles averaged over a number of pings, the file extension is '.A00' where A is for averaged and 00 is the file extension within a run. If data were collected as a test during still-water conditions, the file has the extension '.T00,' with T for test and 00 for the file sequence number.

**Instrument 2.** The 600-kHz system collected data in two different modes. The first mode recorded raw acoustic data over the bottom 30 cm of the water column (2048 samples at 5 MHz), using two different pulse lengths. The data files have extension '.1A0' or '.7A). The '1' corresponds to a pulse length of one code element, and a '7' corresponds to a 17 element coded pulse. 'A' indicates the cart position with the data run (see Figure H1), and '0' indicates the file sequence number when multiple files were collected within a run (0,1, and 2 typically).

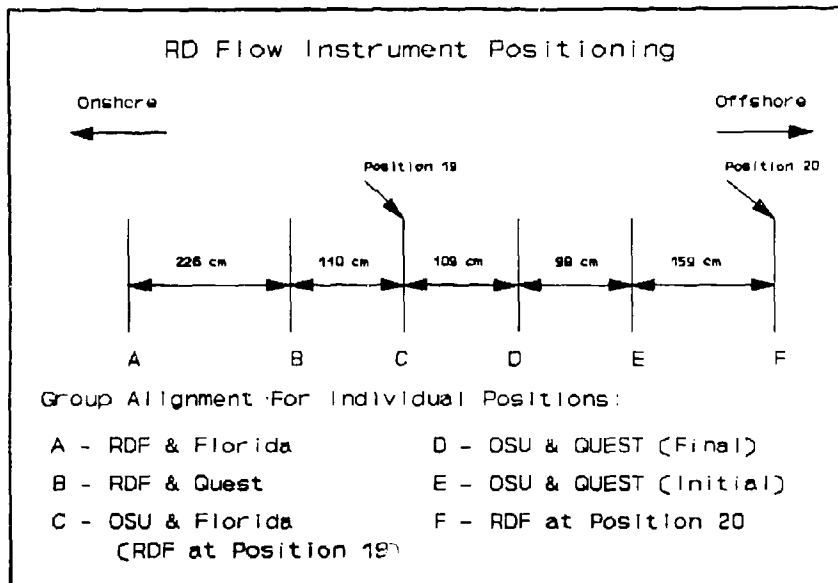


Figure H1. Position of the cart (changed both from run to run and sometimes within a run)

The second set of files contains the root-mean-square (RMS) profiles averaged over 30-sec intervals for the bottom 90 cm (5800 samples at 5 MHz). The RMS values were calculated for each 5-MHz sample and averaged over 64 pings (30-sec). The resolution is to approximately 0.15 mm. The file name extension for this type of data is of the form '.AA,' where the letter indicates the position of the instrument cart.

#### Conversion programs - operating instructions

**Instrument 1.** The 2.4-MHz system has multiple conversion programs, and each extracts one data type from the binary file format to ASCII. The program is called GETXXX and is executed by entering:

```
GETXXX A1208AR2.A00 OUTPUT.XXX
```

XXX is VEL, AMP, COR, or CNF for velocity data, amplitude data (echo level), correlation, and configuration data. The binary data file (A1208AR2.A00) is specified, and the output file name is automatically given the extension of the data type. The ASCII files are:

- .AMP - amplitude profiles from all three beams.
- .VEL - velocity profiles from all three beams.
- .COR - correlation coefficient profiles from all three beams.
- .CNF - a summary file of the system configuration parameters, including pulse spacing and number of pings per ensemble.

**Instrument 2.** There are six different programs to convert the two different types of 600-KHz data files into ASCII data. For each of the two types of files, there are three possible output data configurations to choose from. Raw data files, where the 5-MHz samples were recorded directly, are referred to as Type 1 files. The 30-sec average profile files are referred to as Type 2 files. All six programs are operated in the same format and perform the following functions:

- CONV1RAW - Converts Type 1 files to ASCII format, providing raw data sampled at 5 MHz.
- CONV1RMS - Converts Type 1 files to ASCII format, providing data averaged with RMS filter in 1-cm bins, not corrected for pre-amplifier or gain settings.
- CONV1DB - Converts Type 1 files to ASCII format, providing data averaged with RMS filter in 1-cm bins, corrected for pre-amplifier and gain setting and converted to decibel scale.
- CONV2RAW - Converts Type 2 files to ASCII format, providing raw data sampled at 5 MHz.
- CONV2RMS - Converts Type 2 files to ASCII format, providing data averaged with RMS filter in 1-cm bins, not corrected for pre-amplifier or gain settings.
- CONV2DB - Converts Type 2 files to ASCII format, providing data averaged with RMS filter in 1-cm bins, corrected for pre-amplifier and gain setting and converted to decibel scale.

Each program must be passed two parameters: full name of input file and destination file name without extension. At the DOS prompt, a typical command would look like:

CONV1RAW A0710AR6.1A0 OUTFILE1

The conversion program produces two files, a data file with extension .DAT and a header file with extension .HDR. The data file has each profile as one row of data, with each sample within the profile separated by a space. Note that the lines are very long, with as many as 5800 samples, each requiring

four ASCII characters. The header file provides information about the system configuration during the data run, including file name, type of processing done to data, 600-KHz pre-amplifier and gain settings, pulse length, and sampling rate used. All normal data files will show a sampling rate of 20, corresponding to the 5-MHz sampling. Some special files were taken with a sampling rate of 19, corresponding to 2-MHz sampling. The pulse length is given in number of code elements transmitted, where one code element is two carrier cycles (3.26  $\mu$ sec at 614.4 KHz). Typically, the pulse length is either one code element or 17 code elements in files where coded pulses were used.

## Data plots

Table H1 summarizes the date, run number, time, and length of the time series for data plots shown at the end of the appendix.

**Table H1**  
**Summary of Run Information**

Run	Date	Start time	Time interval sec	Run	Date	Start time	Time interval sec
A0609	91/08/06	09:48:40	300	A1217	91/08/12	17:45:09	300
A0611	91/08/06	11:00:30	300	A1307	91/08/13	07:58:03	277
A0615	91/08/06	14:24:43	300	A1309	91/08/13	09:00:10	300
A0617	91/08/06	17:35:56	300	A1310	91/08/13	10:04:59	300
A0618	91/08/06	18:32:00	300	A1311	91/08/13	11:22:09	300
A0709	91/08/07	10:21:00	285	A1313	91/08/13	13:15:19	291
A0711	91/08/07	11:49:18	233	A1314	91/08/13	14:30:28	300
A0713	91/08/07	13:05:06	301	A1315	91/08/13	15:50:59	296
A0717	91/08/07	17:12:16	300	A1317	91/08/13	17:00:05	300
A0808	91/08/08	08:30:29	300	A1408	91/08/14	08:10:04	202
A0812	91/08/08	12:44:42	300	A1409	91/08/14	09:18:28	202
A0814	91/08/08	14:37:06	129	A1410	91/08/14	10:28:03	202
A0815	91/08/08	15:46:03	191	A1411	91/08/14	11:31:46	242
A0816	91/08/08	16:32:08	300	A1413	91/08/14	13:08:45	243
A0817	91/08/08	17:43:02	300	A1415	91/08/14	15:51:19	242
A0908	91/08/09	08:45:55	300	A1416	91/08/14	16:36:12	243
A0910	91/08/09	10:30:29	300	A1417	91/08/14	17:31:22	243
A0911	91/08/09	11:50:13	300	A1507	91/08/15	07:50:34	242
A0912	91/08/09	13:16:28	300	A1508	91/08/15	08:56:27	243
A0914	91/08/09	14:36:24	300	A1510	91/08/15	10:11:07	242
A0915	91/08/09	15:54:56	300	A1511	91/08/15	11:46:09	246
A0917	91/08/09	16:54:51	300	A1513	91/08/15	13:41:15	257
A1209	91/08/12	09:22:21	300	A1515	91/08/15	15:21:39	244
A1211	91/08/12	11:45:33	224	A1516	91/08/15	16:26:02	245
A1212	91/08/12	12:25:16	245				
A1213	91/08/12	13:56:00	284				
A1215	91/08/12	15:15:12	300				
A1216	91/08/12	16:47:43	300				

## Data File Listing

The following tables summarize all the data collected by RD Flow's two acoustic systems during the first 2 weeks of wave activity at the SUPERTANK project.

There are two types of data files from the 2.4-MHz BB-ADCP. The first uses "single" ping velocity estimates, recorded at approximately 2.5 Hz. The second type of file averages the velocity estimates over either 20 or 50 pings. The 600-kHz system collected three different types of data files. The first records purely raw data from single pings at approximately 6 Hz. These pings alternate between short pulses (two carrier cycles), and longer coded pulses (34 carrier cycles). Due to the large amount of data contained in these files (typically 12 kB/sec), these files were generally only collected over 2-min intervals. The second 600-kHz file type recorded time-averaged RMS values of the signal. The signal was averaged over a 40-sec interval, using a short pulse, and each RMS file covers approximately 8 min. Last, various pulse combinations were tried for later experimentation in Doppler calculations.

The data summary for each system is listed separately, with the 600-kHz system given in Table H2 and the 2.4-MHz system given in Table H3.

The tables use the following abbreviations and conventions:

### Wave type:

- Narrow-Band Random (NBR), Broad-Band Random (BBR), and Monochromatic (MONO).

### File name:

- The SUPERTANK conventions are adhered to.

### Location:

- Refer to Figure H1 for the relative position of the instrument cart.

**Table H2**  
**600 kHz System Data Summary**

Date	Time	Length min	Height m	Period sec	Wave Type	File Name	System	Location	Comments
08/05/91	10:00	40	0.8	3.0	NBR	A0510AR6	600 KHz	Pos. F	4 RMS files
	12:00	70	0.8	3.0	NBR	A0512AR6	600 KHz	Pos. F	6 RMS files
	15:00	70	0.8	3.0	NBR	A0515AR6	600 KHz	Pos. F	2 RMS, 4 continuous files
	17:00	70	0.8	3.0	NBR	A0517AR6	600 KHz	Pos. F	6 RMS, 7 continuous files
08/06/91	08:00	20	0.8	3.0	BBR	A0608AR6	600 KHz	Pos. F	2 RMS, 2 continuous files
	09:00	40	0.8	3.0	BBR	A0609AR6	600 KHz	Pos. F	4 RMS, 4 continuous files
	11:00	70	0.8	3.0	BBR	A0611AR6	600 KHz	Pos. F	6 RMS, 6 continuous files
	13:00	70	0.8	3.0	MONO	A0613AR6	600 KHz	Pos. F	4 RMS, 4 continuous files, longer continuous files taken
	15:00	20	0.8	3.0	BBR	A0615AR6	600 KHz	Pos. A	2 RMS, 2 continuous files
	17:00	20	0.8	3.0	BBR	A0617AR6	600 KHz	Pos. A	2 RMS, 2 continuous files
	18:00	40	0.8	3.0	BBR	A0618AR6	600 KHz	Pos. F	4 RMS, 4 continuous files, water level down about 6 inches
08/07/91	10:00	20	0.8	4.5	NBR	A0710AR6	600 KHz	Pos. C	2 RMS, 2 continuous files
	11:00	40	0.8	4.5	NBR	A0711AR6	600 KHz	Pos. C	2 RMS, 2 continuous files
	13:00	70	0.8	4.5	NBR	A0713AR6	600 KHz	Pos. A	6 RMS, 6 continuous files
	15:00	70	0.8	4.5	NBR	A0715AR6	600 KHz	Pos. A	5 RMS, 5 continuous files
	18:00	5	0.3	4.5	MONO	A0718AR6	600 KHz	Pos. A	1 continuous file, 4 min long

Table H2 (continued)

Date	Time	Length min	Height m	Period sec	Wave Type	File Name	System	Location	Comments
08/08/91	08:00	40	0.8	4.5	BBR	A0808AR6	600 KHz	Pos. A	3 RMS, 3 continuous files
	09:00	70	0.8	4.5	BBR	A0809AR6	600 KHz	Pos. C	4 RMS, 4 continuous files
	12:00	20	0.8	4.5	BBR	A0912AR6	600 KHz	Pos. C	2 RMS, 2 continuous files
	14:00	20	0.8	4.5	BBR	A0814AR6	600 KHz	Pos. A	2 RMS, 2 continuous files
	15:00	20	0.8	4.5	BBR	A0815AR6	600 KHz	Pos. A	2 RMS, 2 continuous files
	16:00	20	0.8	4.5	MONO	A0816AR6	600 KHz	Pos. A	2 RMS, 2 continuous files
	17:00	20	0.8	4.5	MONO	A0817AR6	600 KHz	Pos. C	2 RMS, 3 continuous files
08/09/91	08:00	20	0.8	6.0	BBR	A0908AR6	600 KHz	Pos. C	3 RMS, 3 continuous files
	10:00	40	0.5	5.0	BBR	A0910AR6	600 KHz	Pos. C Pos. A	1 continuous file, 1st 20 min 2 RMS, 2 continuous files, 2nd 20 min
	11:00	40	0.7	3.0	BBR	A0911AR6	600 KHz	Pos. C Pos. A	1 continuous file, 1st 20 min 2 RMS, 2 continuous files, 2nd 20 min
	12:00	40	0.9	3.0	BBR	A0912AR6	600 KHz	Pos. C Pos. A	no files 1st 20 min 1 RMS, 2 continuous files, 2nd 20 min
	14:00	40	0.9	4.5	BBR	A0914AR6	600 KHz	Pos. C Pos. A	1 RMS, 1 continuous file, 1st 20 min 2 RMS, 2 continuous files, 2nd 20 min
	15:00	40	0.7	5.0	BBR	A0915AR6	600 KHz	Pos. C Pos. A	1 RMS, 1 continuous file, 1st 20 min 2 RMS, 2 continuous files, 2nd 20 min
	17:00	5	1.3 (max)	3.0	MONO	A0917AR6	600 KHz	Pos. A	1 RMS (partial) 1 continuous file (4 min)



Table H2 (continued)									
Date	Time	Length min	Height m	Period sec	Wave Type	File Name	System	Location	Comments
08/12/91	09:00	40	0.2	8.0	BBR	A1209AR6	600 KHz	Pos. A	1 RMS, 1 continuous file, 1st 10 min
								Pos. C	1 RMS, 1 continuous file, 2nd 10 min
								Pos. B	1 RMS, 1 continuous file, 3rd 10 min
	11:00	40	0.2	8.0	MONO	A1211AR6	600 KHz	Pos. E	1 RMS, 1 continuous file, 1st 10 min
								Pos. C	1 RMS, 1 continuous file, 2nd 10 min
								Pos. B	1 RMS, 1 continuous file, 3rd 10 min
								Pos. A	1 RMS, 1 continuous file, 4th 10 min
	12:00	40	0.4	8.0	BBR	A1212AR6	600 KHz	Pos. A	1 RMS, 1 continuous file, 1st 10 min
								Pos. B	1 RMS, 1 continuous file, 2nd 10 min
								Pos. C	1 RMS, 1 continuous file, 3rd 10 min
								Pos. E	1 RMS, 1 continuous file, 4th 10 min
	13:00	40	0.4	8.0	MONO	A1213AR6	600 KHz	Pos. A	1 RMS, 1 continuous file, 1st 10 min
								Pos. B	1 RMS, 1 continuous file, 2nd 10 min
								Pos. C	1 RMS, 1 continuous file, 3rd 10 min
								Pos. E	1 RMS, 1 continuous file, 4th 10 min
	15:00	40	0.6	8.0	BBR	A1215AR6	600 KHz	Pos. B	2 RMS, 2 continuous files, 1st 20 min
								Pos. A	2 RMS, 2 continuous files, 2nd 20 min
									some problems with data storage
	16:00	40	0.6	8.0	MONO	A1216AR6	600 KHz	Pos. D	2 RMS, 2 continuous files
								Pos. B	2 RMS, 2 continuous files, 1st 20 min
								Pos. D	2 RMS, 2 continuous files, 2nd 20 min
	17:00	40	0.8	8.0	BBR	A1217AR6	600 KHz		

Table H2 (continued)

Date	Time	Length min	Height m	Period sec	Wave Type	File Name	System	Location	Comments
08/13/91	07:00	40	0.2	3.0	BBR	A1307BR6	600 KHz	Pos. B Pos. D	2 RMS, 2 continuous files, 1st 20 min 2 RMS, 2 continuous files, 2nd 20 min
	09:00	40	0.2	3.0	MONO	A1309AR6	600 KHz	Pos. D Pos. B	2 RMS, 2 continuous files, 1st 20 min 1 RMS, 1 continuous file, 2nd 20 min
	10:00	40	0.4	3.0	BBR	A1310AR6	600 KHz	Pos. B Pos. D	2 RMS, 2 continuous files, 1st 20 min 1 RMS, 1 continuous file, 2nd 20 min
	11:00	40	0.4	3.0	MONO	A1311AR6	600 KHz	Pos. D Pos. B	1 RMS, 1 continuous file, 1st 20 min 2 RMS, 2 continuous files, 2nd 20 min
	13:00	40	0.6	3.0	BBR	A1313AR6	600 KHz	Pos. D Pos. B	1 RMS, 1 continuous file, 1st 20 min 2 RMS, 2 continuous files, 2nd 20 min
	14:00	40	0.6	3.0	MONO	A1314AR6	600 KHz	Pos. D Pos. B	1 RMS, 1 continuous file, 1st 20 min 2 RMS, 1 continuous file, 2nd 20 min
	15:00	20	0.8	3.0	BBR	A1315AR6	600 KHz	Pos. D Pos. B	3 doppler files (software problems) 2 RMS, 2 continuous files
	17:00	20	0.8	3.0	MONO	A1317AR6	600 KHz	Pos. D Pos. B	10 doppler files 2 RMS, 2 continuous files, 10 doppler files
08/14/91	08:00	20	0.4	8.0	BBR	A1408BR6	600 KHz	Pos. D	1 RMS, 1 continuous file, 1 doppler file
	09:00	20	0.4	8.0	BBR	A1409AR6	600 KHz	Pos. B	1 RMS, 1 continuous file, 1 doppler file
	10:00	20	0.4	8.0	BBR	A1410AR6	600 KHz	Pos. A	1 RMS, 1 continuous file, 1 doppler file
	11:00	70	0.4	8.0	BBR	A1411AR6	600 KHz	Pos. D	2 RMS, 2 continuous files, 3 doppler files
	13:00	70	0.4	8.0	BBR	A1413AR6	600 KHz	Pos. B	2 RMS, 2 continuous files, 3 doppler files
	15:00	20	0.5	8.0	BBR	A1415BR6	600 KHz	Pos. D	1 RMS, 1 continuous file, 1 doppler file
	16:00	40	0.5	8.0	BBR	A1416AR6	600 KHz	Pos. B	2 RMS, 2 continuous files, 2 doppler files
	17:00	70	0.5	8.0	BBR	A1417AR6	600 KHz	Pos. C	2 RMS, 2 continuous files, 4 doppler files

Table H2 (continued)

Date	Time	Length min	Height m	Period sec	Wave Type	File Name	System	Location	Comments
08/15/91	07:00	20	0.4	9.0	NBR	A1507BR6	600 KHz	Pos. D	1 RMS, 1 continuous file
	08:00	40	0.4	9.0	NBR	A1508AR6	600 KHz	Pos. B	1 RMS, 1 continuous file, 1 doppler file
	09:00	70	0.4	9.0	NBR	A1509AR6	600 KHz	Pos. D	2 RMS, 2 continuous file, 4 doppler file
	11:00	70	0.4	9.0	NBR	A1511AR6	600 KHz	Pos. C	2 RMS, 2 continuous files, 4 doppler files
	13:00	70	0.4	9.0	NBR	A1513AR6	600 KHz	Pos. A	2 RMS, 2 continuous files, 4 doppler files
	15:00	40	0.5	9.0	NBR	A1515AR6	600 KHz	Pos. A	2 RMS, 2 continuous files, 4 doppler files, water level down 6 inches
	16:00	70	0.5	9.0	NBR	A1516AR6	600 KHz	Pos. C	2 RMS, 2 continuous files, 4 doppler files, water level down 6 inches

**Table H3**  
**2.4 MHz System Data Summary**

Data	Time	Length min	Height m	Period sec	Wave Type	File Name	System	Location	Comments
08/09/91	08:00	20	0.8	6.0	BBR	A0908AR2	2.4 MHz	Pos. C	2 "single" ping test files
	10:00	40	0.5	5.0	BBR	A0910AR2	2.4 MHz	Pos. C Pos. A	1 "single" ping file, 1-20 ping average file, 1st 20 min 1 "single" ping file, 1-50 ping average file, last 20 min
	11:00	40	0.7	3.0	BBR	A0911AR2	2.4 MHz	Pos. C Pos. A	1 "single" ping file, 1st 20 min 1 "single" ping file, 1-50 ping average file, last 20 min
	12:00	40	0.9	3.0	BBR	A0912AR2	2.4 MHz	Pos. C Pos. A	1 "single" ping file, 1st 20 min 1 "single" ping file, 1-20 ping average file, last 20 min
	14:00	40	0.9	4.5	BBR	A0914AR2	2.4 MHz	Pos. C Pos. A	1 "single" ping file, 1-20 ping average file, 1st 20 min 1 "single" ping file, last 20 min
	15:00	40	0.7	5.0	BBR	A0915AR2	2.4 MHz	Pos. C Pos. A	1 "single" ping file, 1-20 ping average file, 1st 20 min 1 "single" ping file, last 20 min
	17:00	5	1.3 (max)	3.0	MONO	A0917AR2	2.4 MHz	Pos. A	1 "single" ping raw data file (10 min)

Table H3 (continued)									
Date	Time	Length min	Height m	Period sec	Wave Type	File Name	System	Location	Comments
08/12/91	09:00	40	0.2	8.0	BBR	A1209AR2	2.4 MHz	Pos. A	1 "single" ping file, 1st 10 min
								Pos. C	1 "single" ping file, 2nd 20 min
								Pos. B	1 "single" ping file, 3rd 10 min
	11:00	40	0.2	8.0	MONO	A1211AR2	2.4 MHz	Pos. E	1-20 ping average file, 1st 10 min
								Pos. C	1-20 ping average file, 2nd 10 min
								Pos. B	1 "single" ping file, 3rd 10 min
	12:00	40	0.4	8.0	BBR	A1212AR2	2.4 MHz	Pos. A	1 "single" ping file, 4th 10 min
								Pos. A	1 "single" ping file, 1st 10 min
								Pos. B	1 "single" ping file, 2nd 10 min
	13:00	40	0.4	8.0	MONO	A1213AR2	2.4 MHz	Pos. C	1-20 ping average file, 3rd 10 min
								Pos. C	1-20 ping average file, 3rd 10 min
								Pos. E	1-20 ping average file, 4th 10 min
	15:00	40	0.6	8.0	BBR	A1215AR2	2.4 MHz	Pos. B	1 "single" ping, 1-20 ping average file, 1st 20 min
								Pos. A	1 "single" ping, 1-20 ping average file, 2nd 20 min
								Pos. B	2 "single" ping, 2-20 ping average files
	16:00	40	0.6	8.0	MONO	A1216AR2	2.4 MHz	Pos. D	1 "single" ping, 1-20 ping average, 1st 20 min
								Pos. B	1 "single" ping, 1-20 ping average, 1st 20 min
								Pos. D	1 "single" ping, 1-20 ping average, 2nd 20 min
	17:00	40	0.8	8.0	BBR	A1217AR2	2.4 MHz	Pos. B	1 "single" ping, 1-20 ping average, 1st 20 min
								Pos. B	1 "single" ping, 1-20 ping average, 1st 20 min
								Pos. D	1 "single" ping, 1-20 ping average, 2nd 20 min

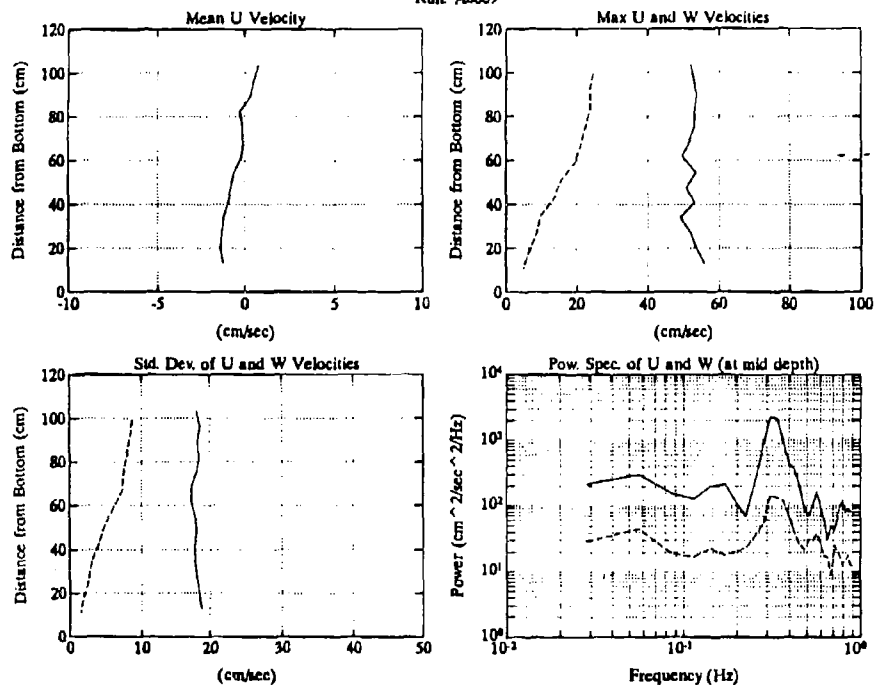
Table H3 (continued)

Date	Time	Length min	Height m	Period sec	Wave Type	File Name	System	Location	Comments
08/13/91	07:00	40	0.2	3.0	BBR	A1307BR2	2.4 MHz	Pos. B Pos. D	1 "single", 1-20 avg file, 1st 20 min 1 "single", 1-20 avg file, 2nd 20 min
	09:00	40	0.2	3.0	MONO	A1309AR2	2.4 MHz	Pos. D Pos. B	1 "single", 1-20 avg file, 1st 20 min 1 "single", 1-20 avg file, 2nd 20 min
	10:00	40	0.4	3.0	BBR	A1310AR2	2.4 MHz	Pos. B Pos. D	1 "single", 1-20 avg file, 1st 20 min 1 "single", 1-20 avg file, 2nd 20 min
	11:00	40	0.4	3.0	MONO	A1311AR2	2.4 MHz	Pos. D Pos. B	1 "single", 1-20 avg file, 1st 20 min 1 "single", 1-20 avg file, 2nd 20 min
	13:00	40	0.6	3.0	BBR	A1313AR2	2.4 MHz	Pos. D Pos. B	1 "single", 1-20 avg file, 1st 20 min 1 "single", 1-20 avg file, 2nd 20 min
	14:00	40	0.6	3.0	MONO	A1314AR2	2.4 MHz	Pos. D Pos. B	1 "single", 1-20 avg file, 1st 20 min 1 "single", 1-20 avg file, 2nd 20 min
	15:00	20	0.8	3.0	BBR	A1315AR2	2.4 MHz	Pos. D Pos. B	1 "single", 1-20 avg file, 1st 20 min 1 "single", 1-20 avg file, 2nd 20 min
	17:00	20	0.8	3.0	MONO	A1317AR2	2.4 MHz	Pos. D Pos. B	1 "single", 1-20 avg file, 1st 20 min 1 "single", 1-20 avg file, 2nd 20 min
	08:00	20	0.4	8.0	BBR	A1408BR2	2.4 MHz	Pos. D	1 "single", 1-20 ping avg file
	09:00	20	0.4	8.0	BBR	A1409AR2	2.4 MHz	Pos. B	1 "single", 1-20 ping avg file
08/14/91	10:00	20	0.4	8.0	BBR	A1410AR2	2.4 MHz	Pos. A	1 "single", 1-20 ping avg file
	11:00	70	0.4	8.0	BBR	A1411AR2	2.4 MHz	Pos. D	2 "single", 2-20 ping avg file
	13:00	70	0.4	8.0	BBR	A1413AR2	2.4 MHz	Pos. B	2 "single", 2-20 ping avg file
	15:00	20	0.5	8.0	BBR	A1415BR2	2.4 MHz	Pos. D	1 "single", 1-20 ping avg file
	16:00	40	0.5	8.0	BBR	A1416AR2	2.4 MHz	Pos. B	2 "single", 2-20 ping avg file
	17:00	70	0.5	8.0	BBR	A1417AR2	2.4 MHz	Pos. C	2 "single", 1-20 ping avg file

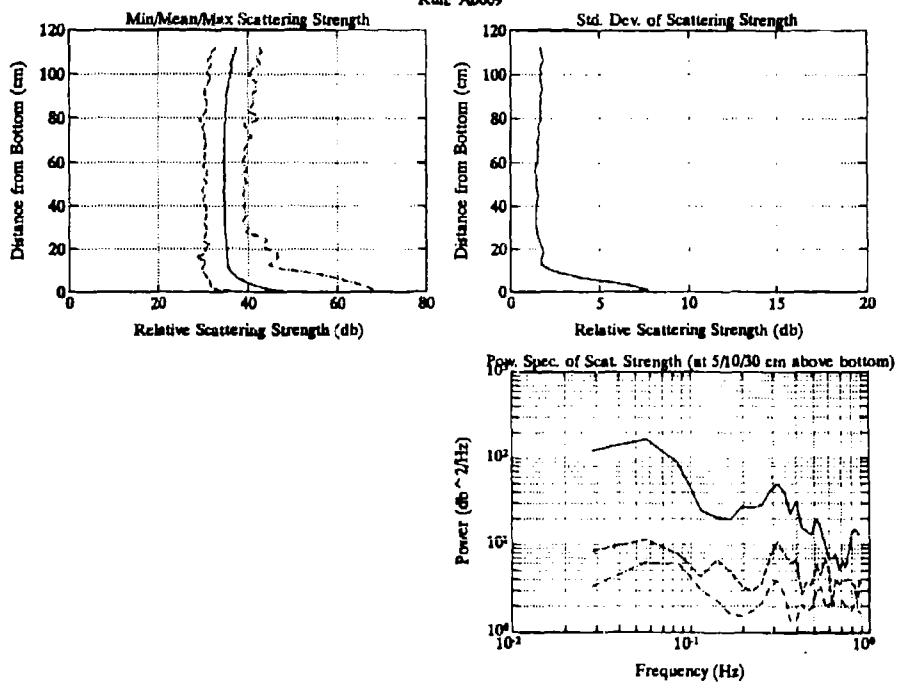
Table H3 (continued)

Date	Time	Length min	Height m	Period sec	Wave Type	File Name	System	Location	Comments
08/15/91	07:00	20	0.4	9.0	NBR	A1507BR2	2.4 MHz	Pos. D	1 "single", 1-20 ping avg file
	08:00	40	0.4	9.0	NBR	A1508AR2	2.4 MHz	Pos. B	1 "single", 1-20 ping avg file
	09:00	70	0.4	9.0	NBR	A1509AR2	2.4 MHz	Pos. D	2 "single", 2-20 ping avg file
	11:00	70	0.4	9.0	NBR	A1511AR2	2.4 MHz	Pos. C	2 "single", 2-20 ping avg file
	13:00	70	0.4	9.0	NBR	A1513AR2	2.4 MHz	Pos. A	2 "single", 2-20 ping avg file
	15:00	40	0.5	9.0	NBR	A1515AR2	2.4 MHz	Pos. A	2 "single", 2-20 ping avg file, water level down 6 inches
	18:00	70	0.5	9.0	NBR	A1516AR2	2.4 MHz	Pos. C	2 "single", 2-20 ping avg file, water level still down 6 inches

Run: A0609

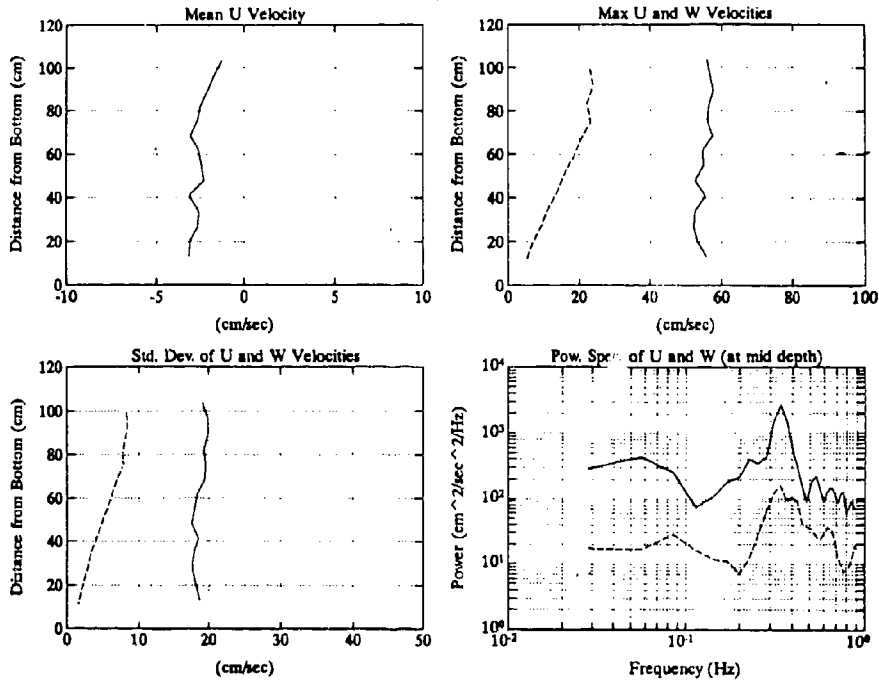


Run: A0609

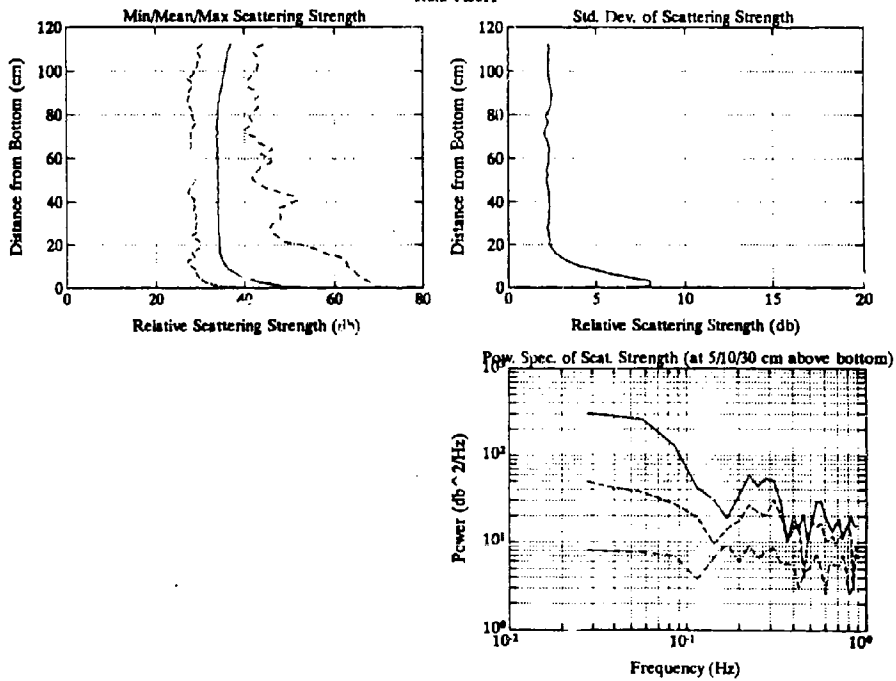




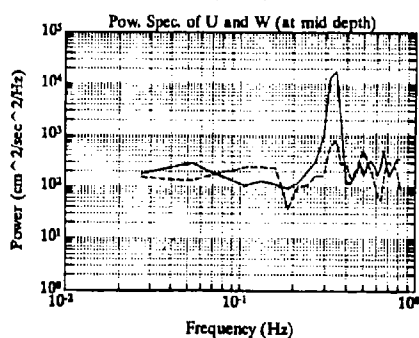
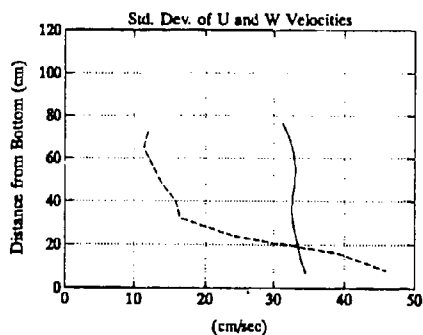
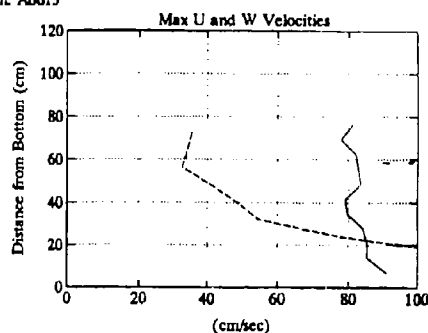
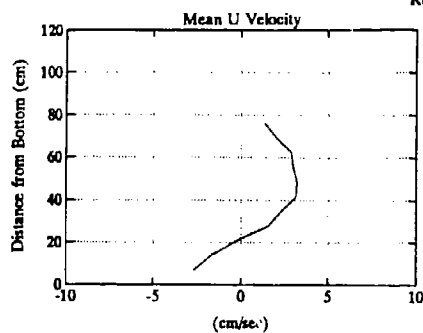
Run: A0611



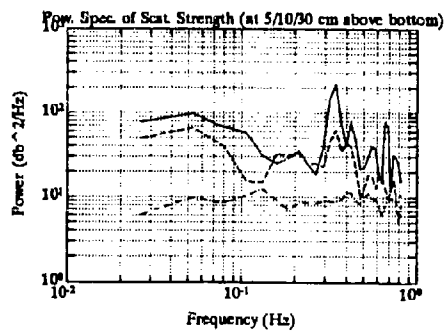
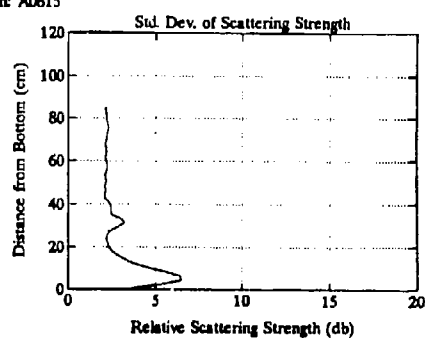
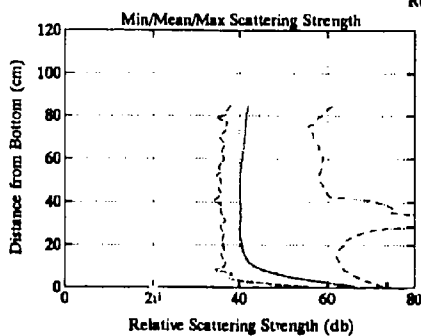
Run: A0611



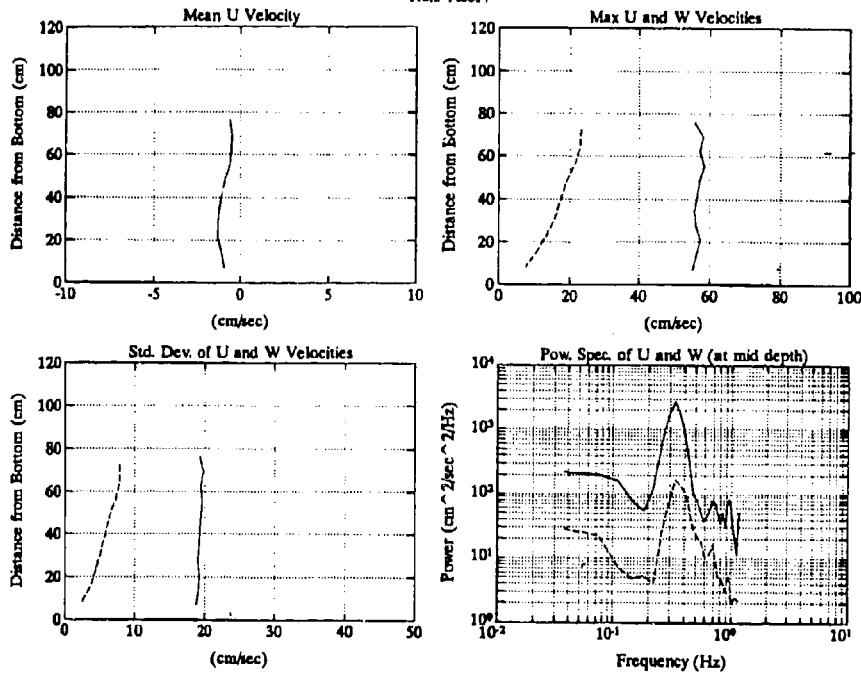
Run: A0615



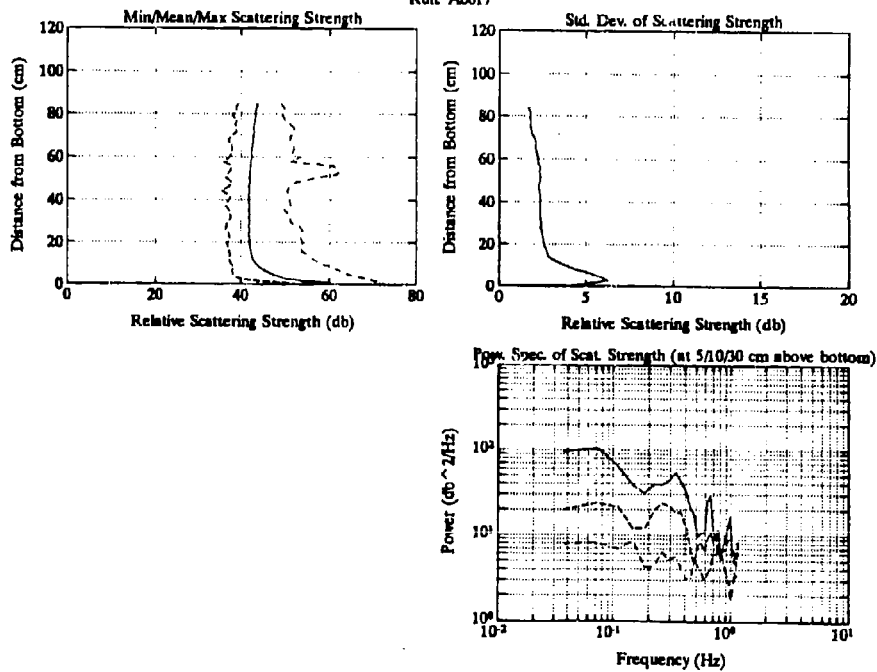
Run: A0615



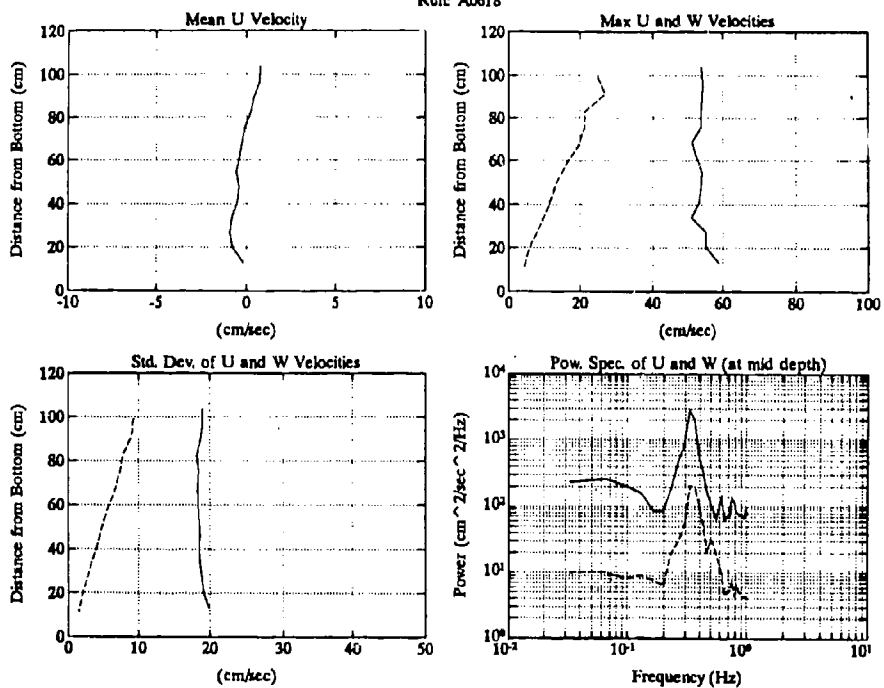
Run: A0617



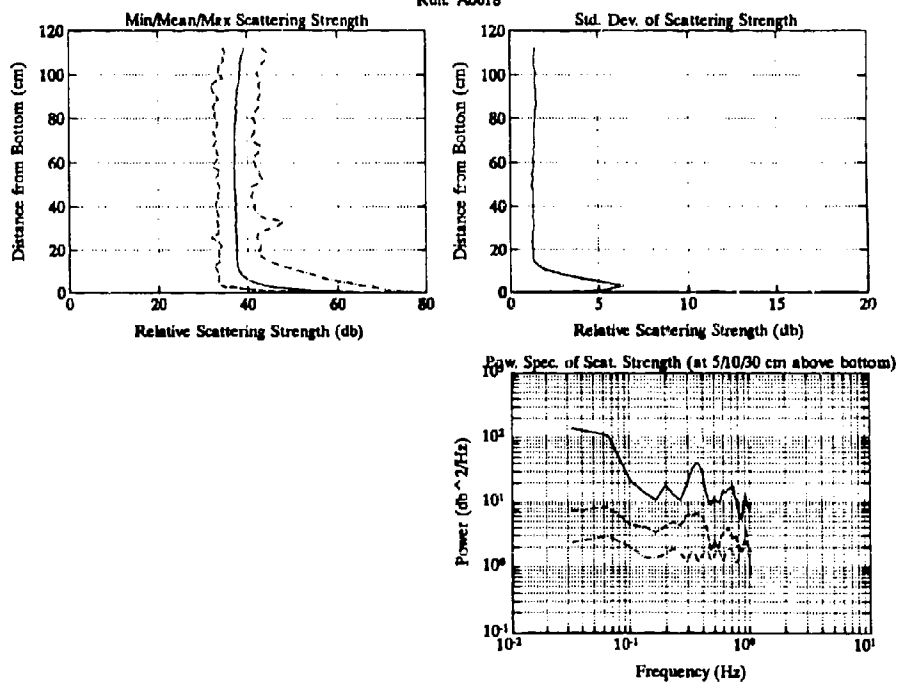
Run: A0617



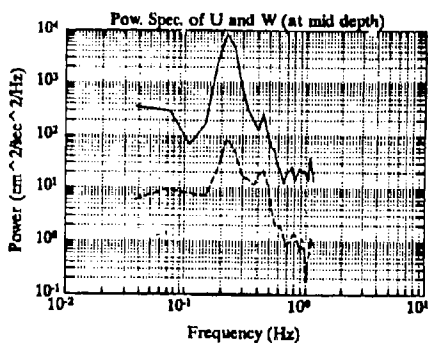
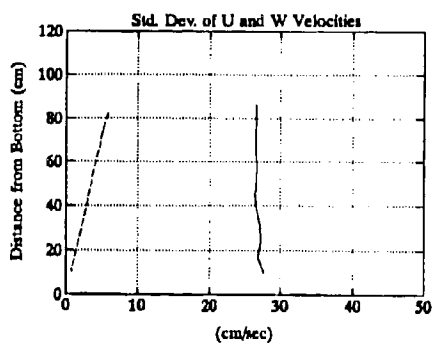
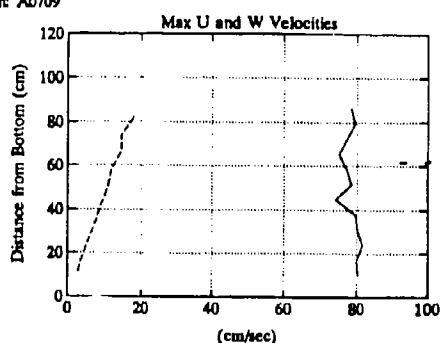
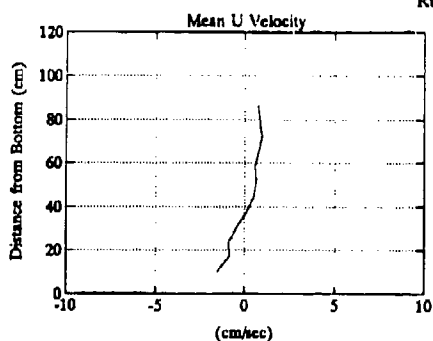
Run: A0618



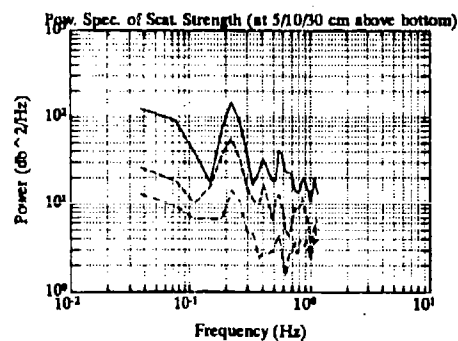
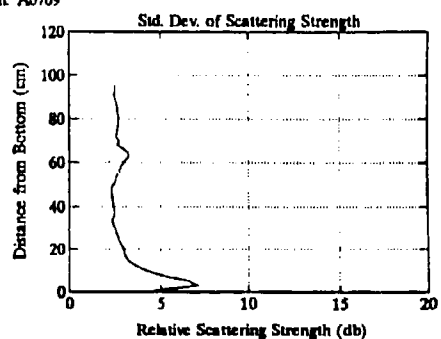
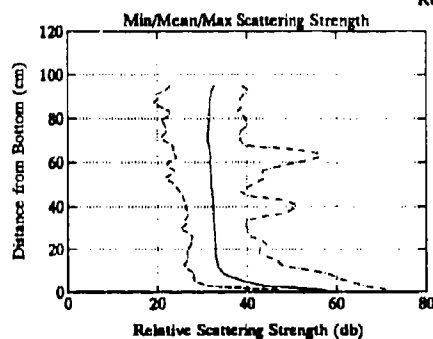
Run: A0618



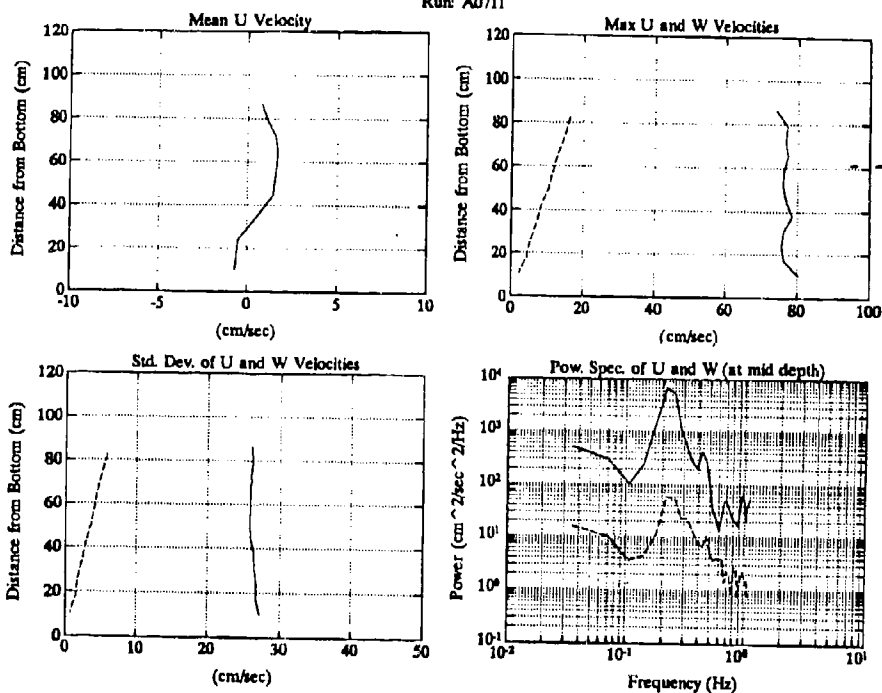
Run: A0709



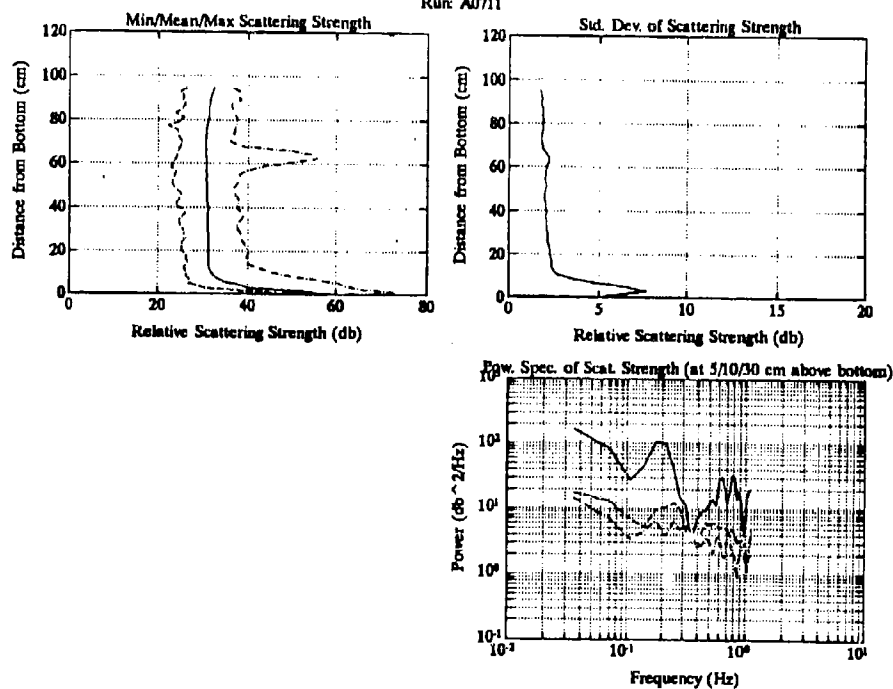
Run: A0709

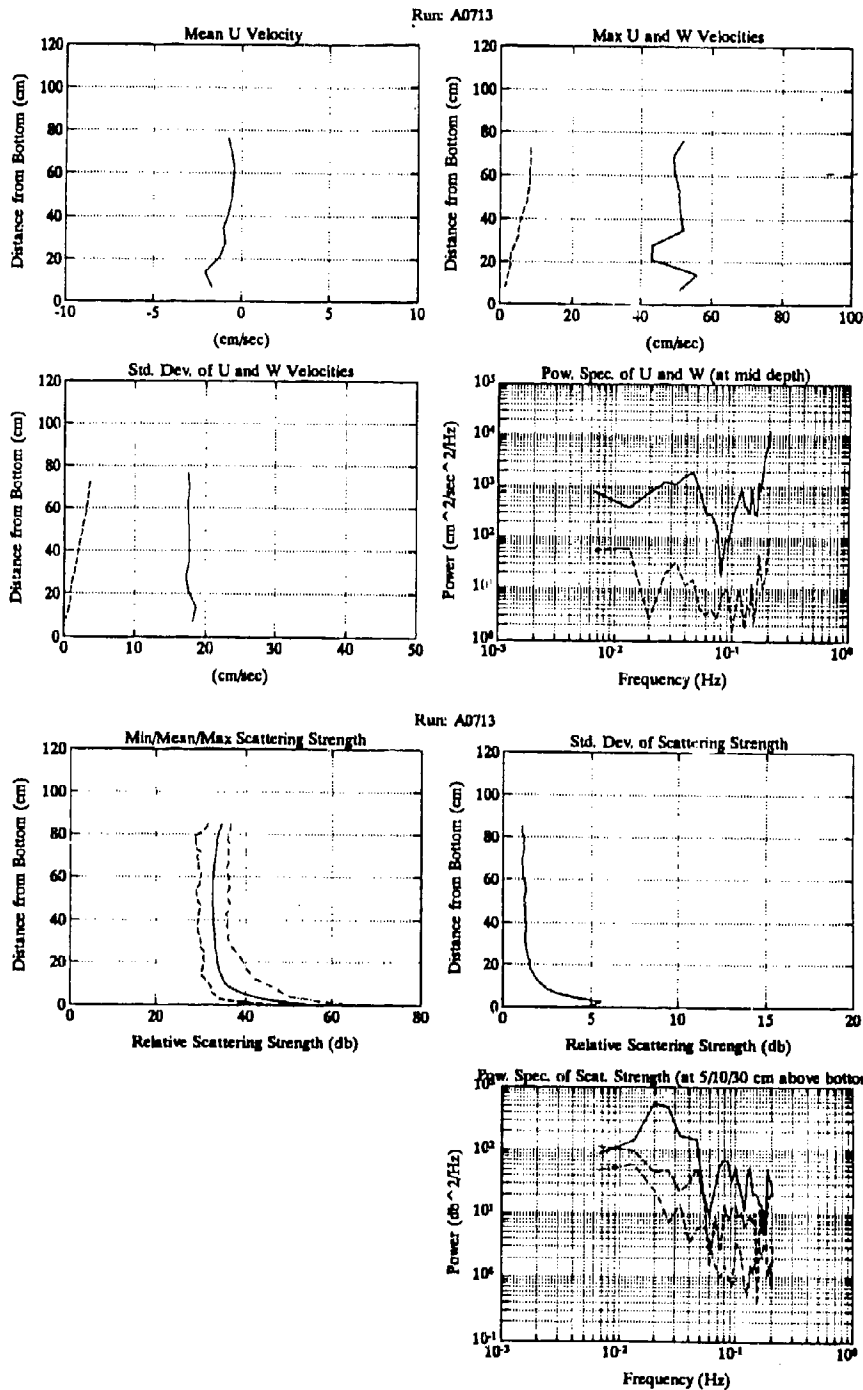


Run: A0711

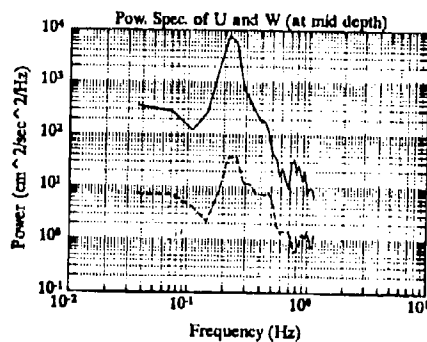
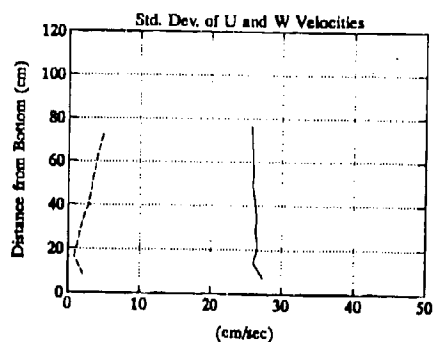
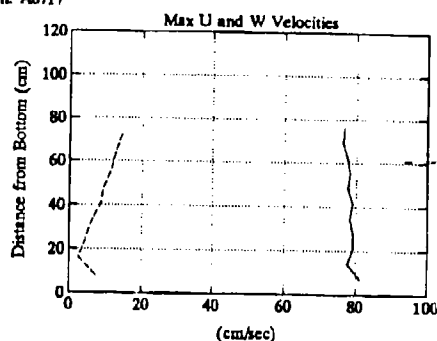
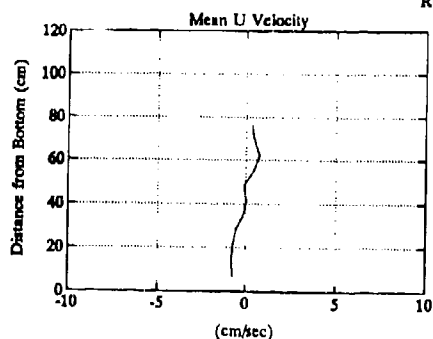


Run: A0711

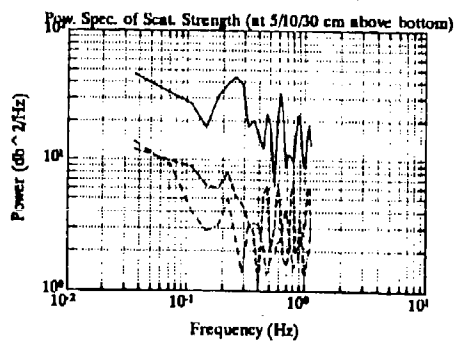
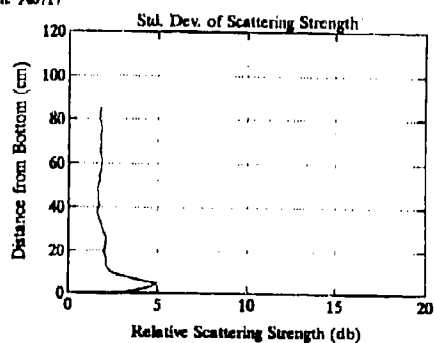
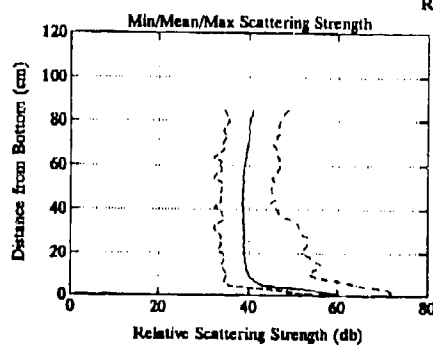




Run: A0717

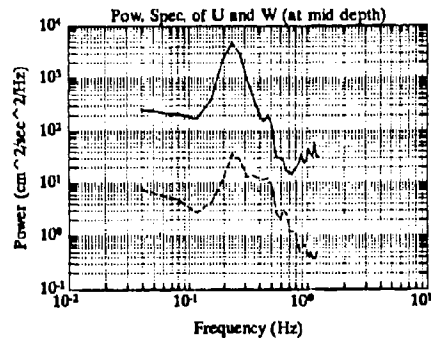
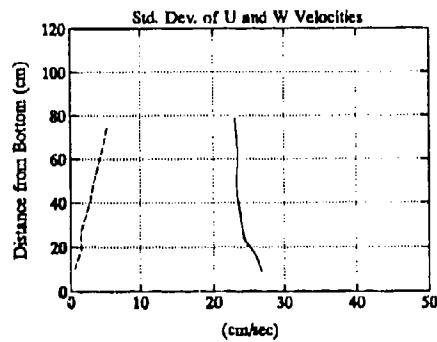
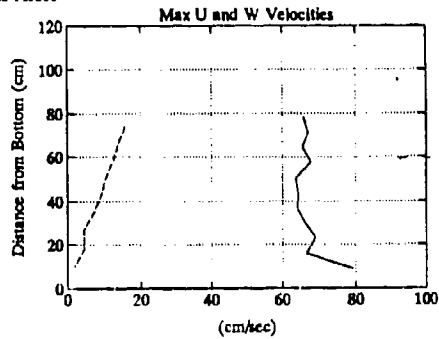
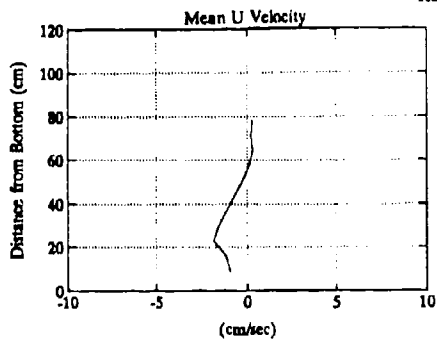


Run: A0717

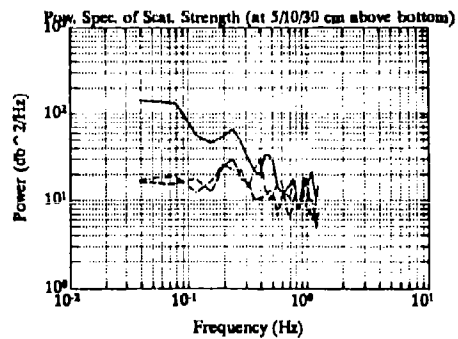
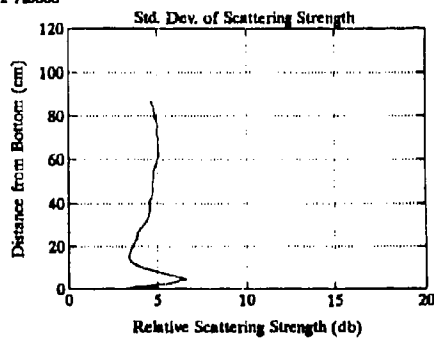
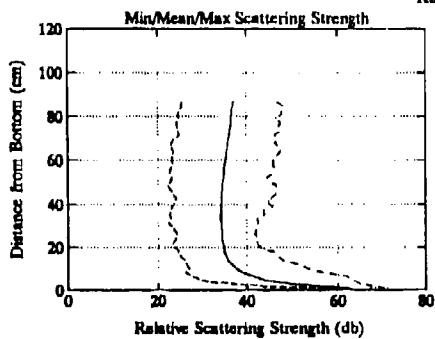


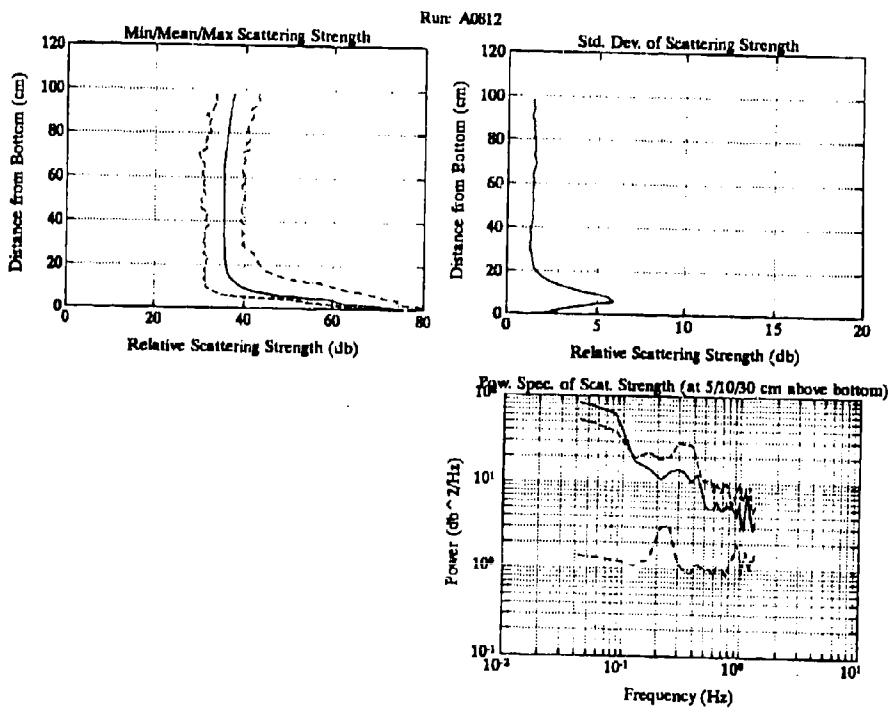
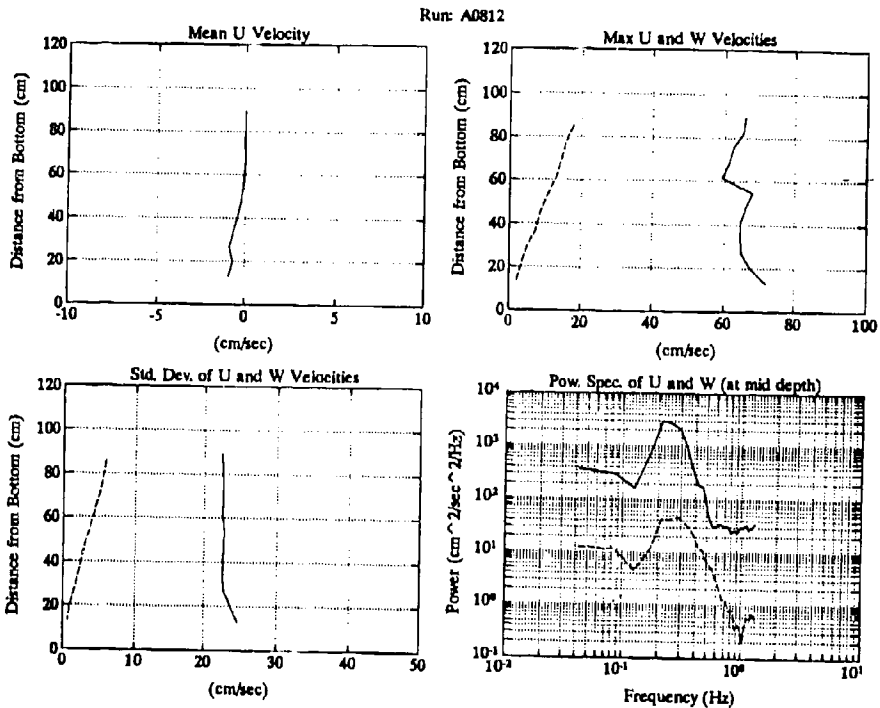


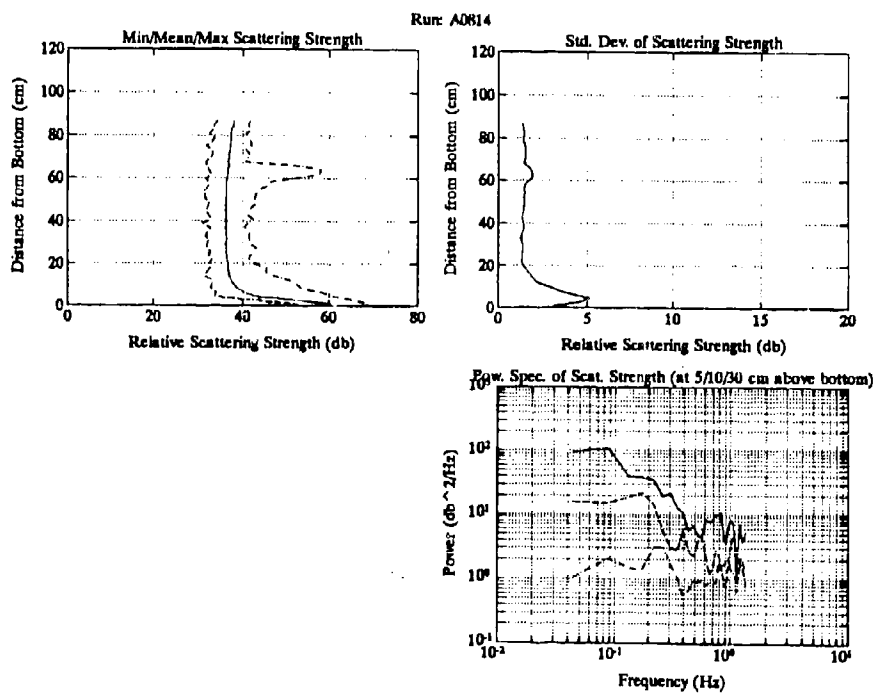
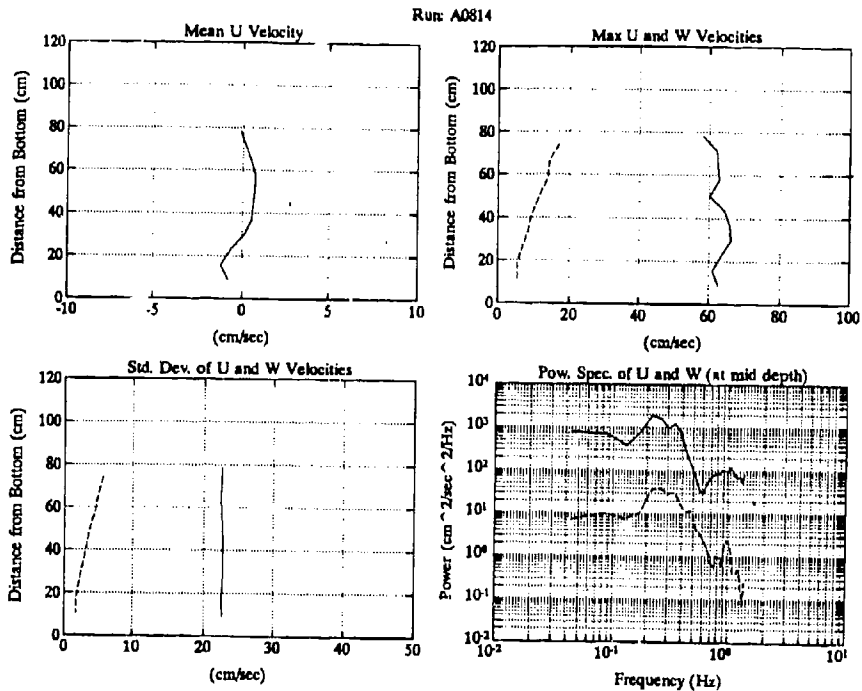
Run: A0808



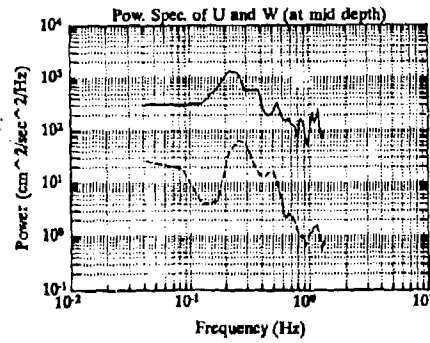
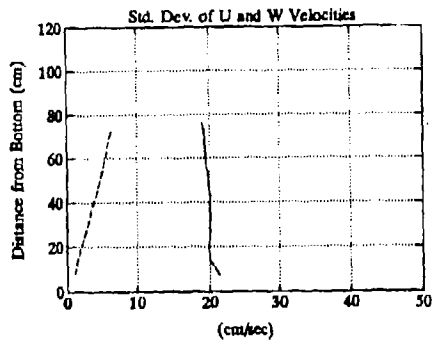
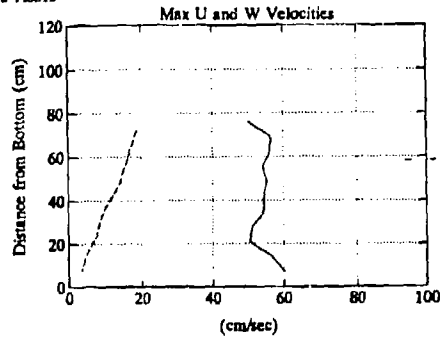
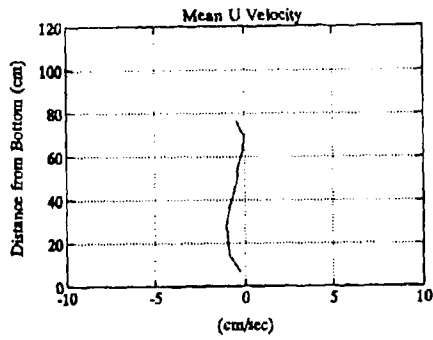
Run: A0808



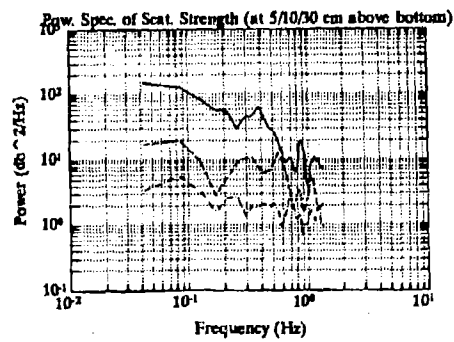
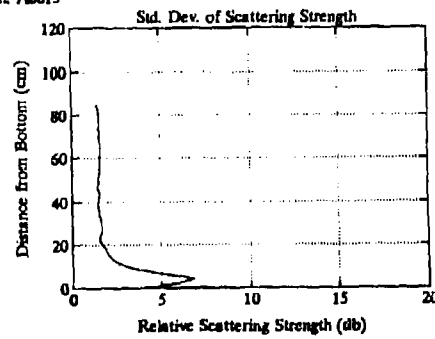
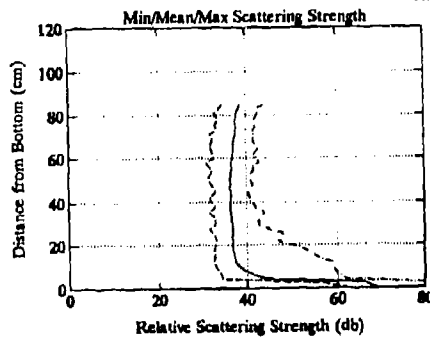


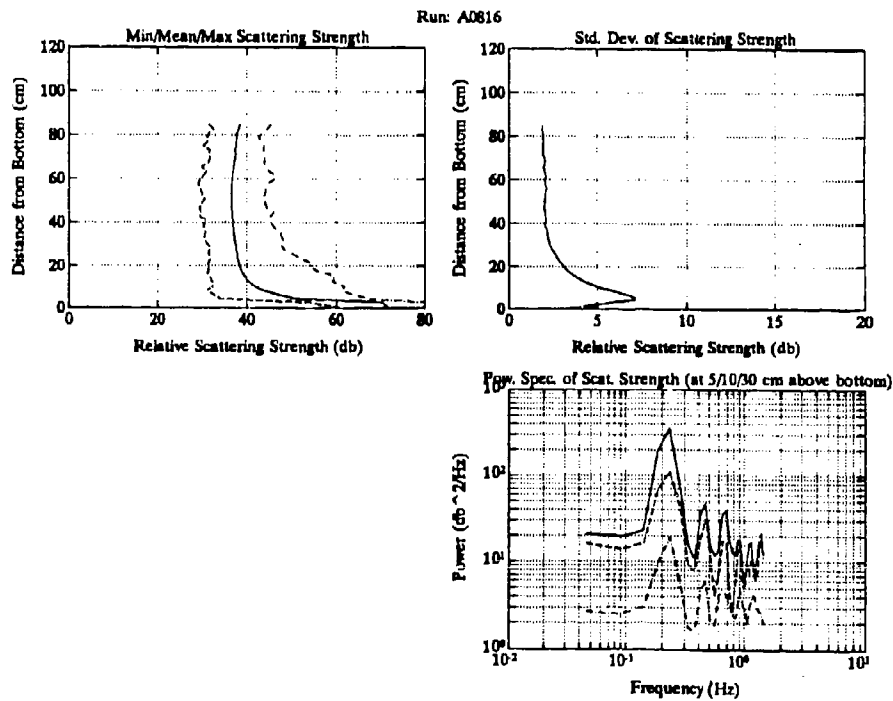
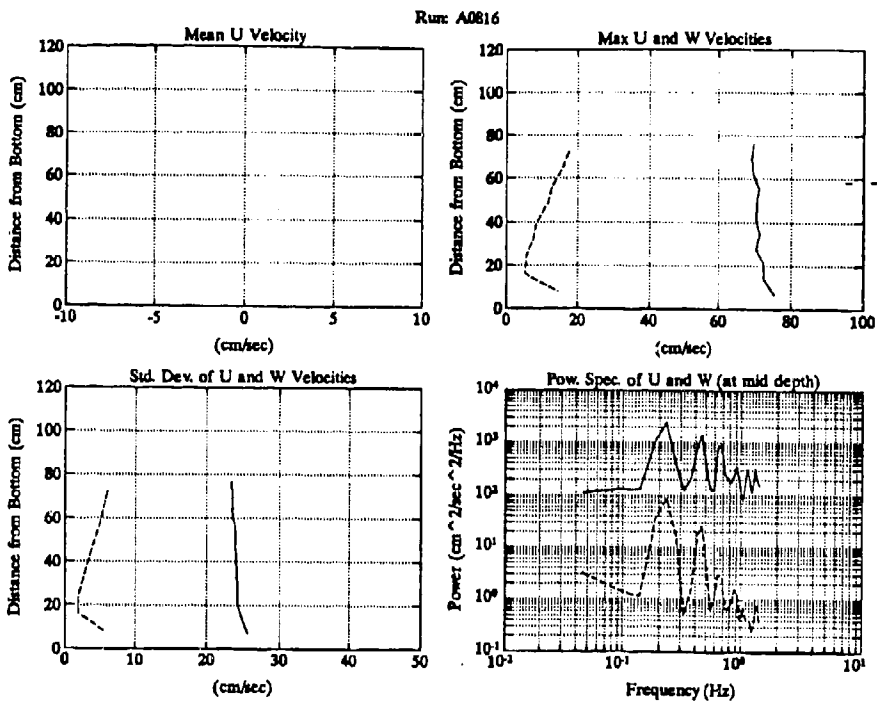


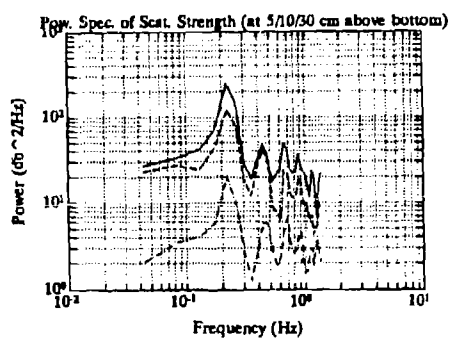
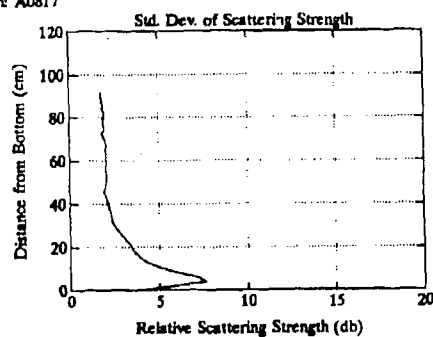
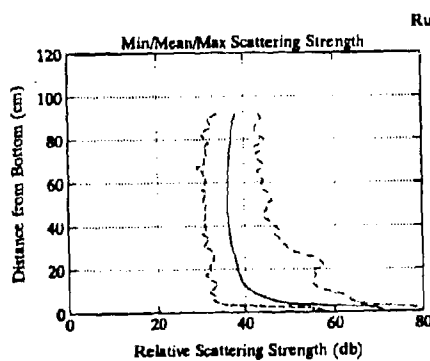
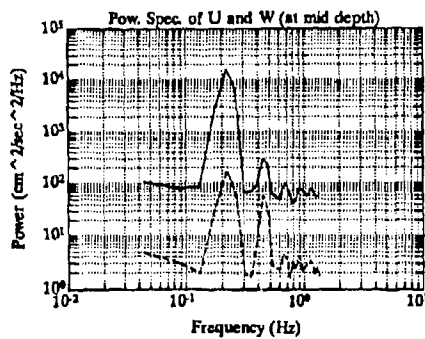
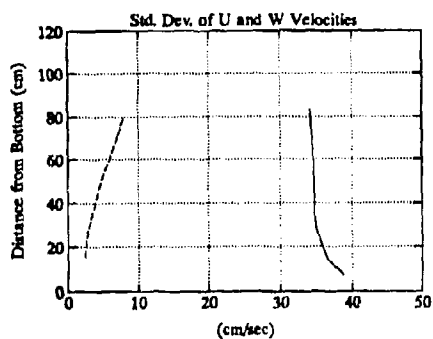
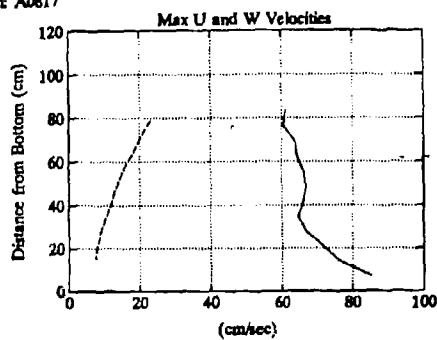
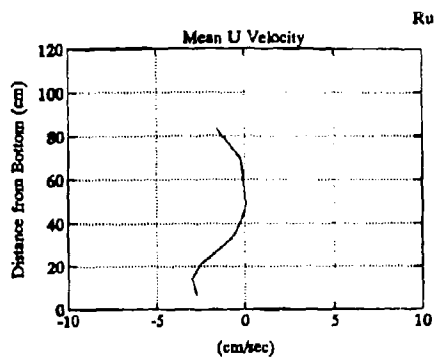
Run: A0815

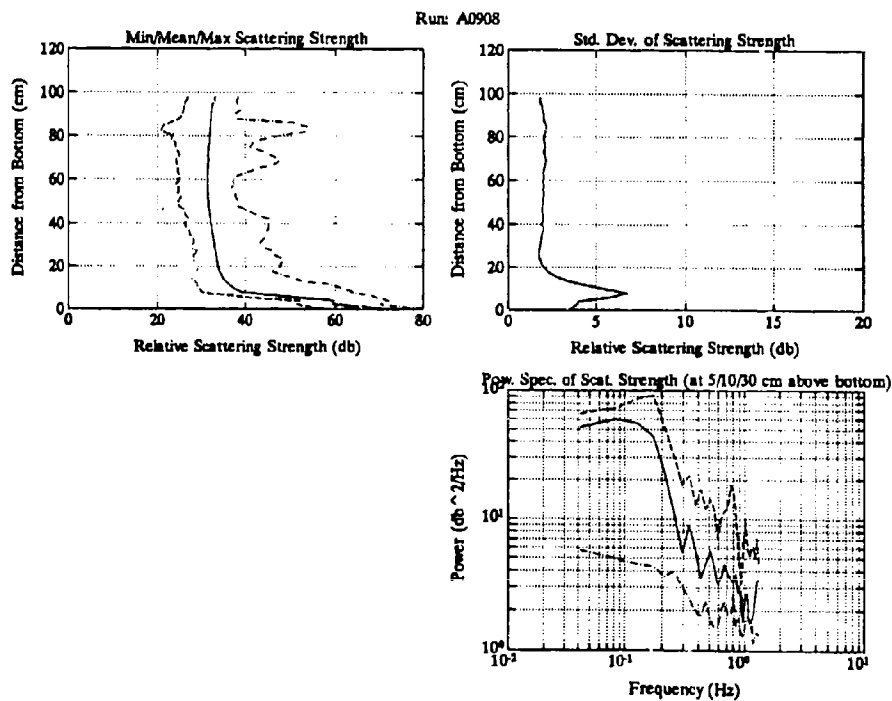
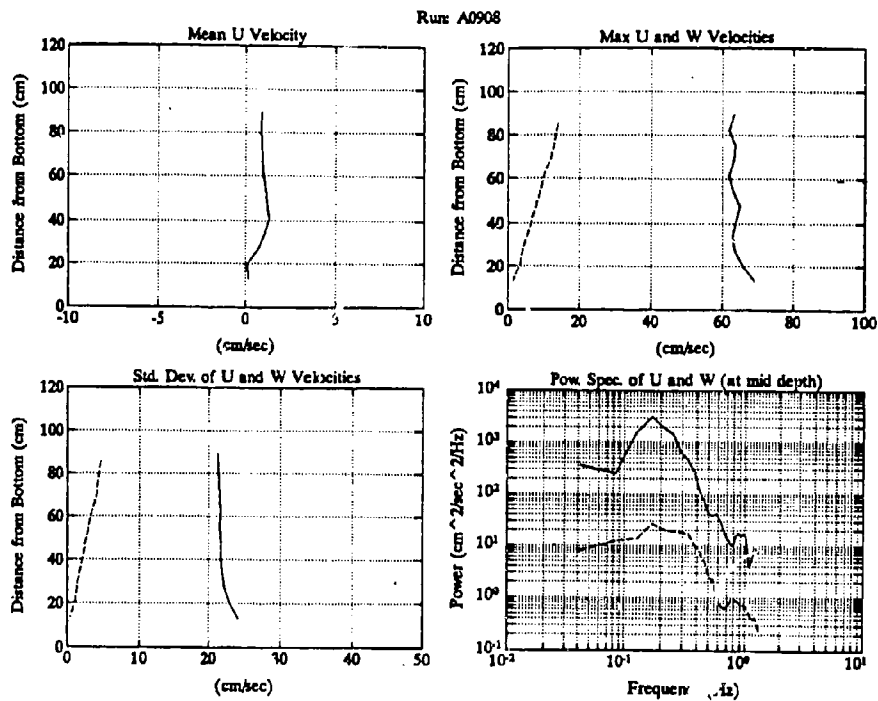


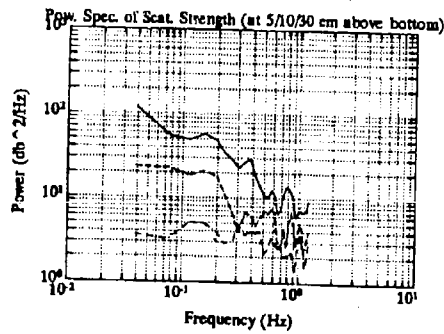
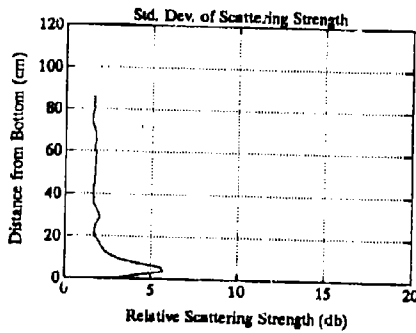
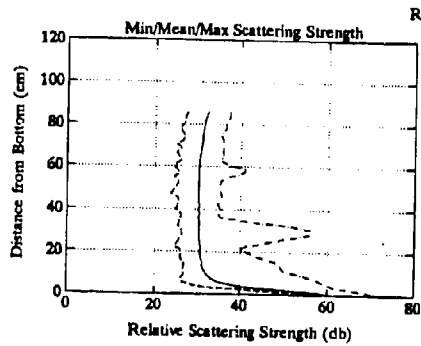
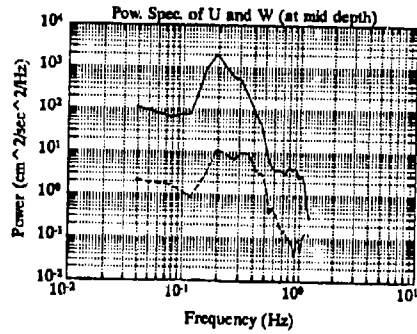
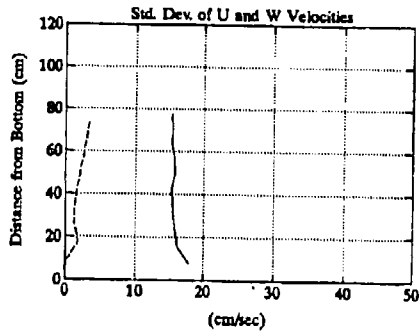
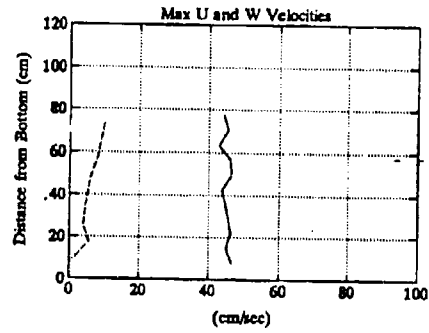
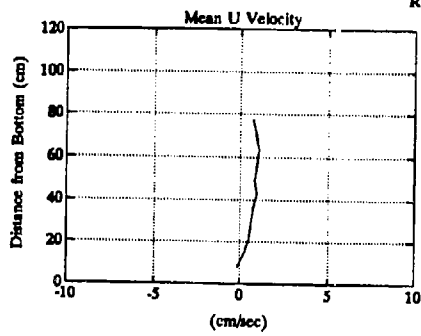
Run: A0815





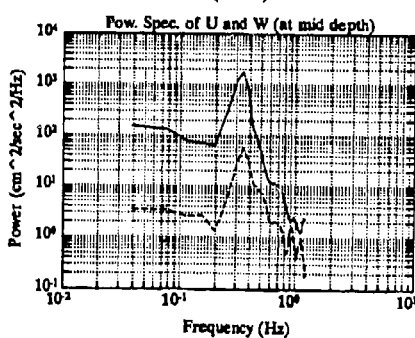
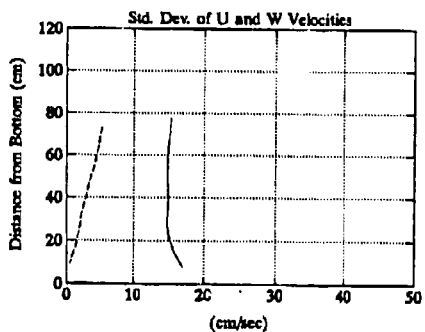
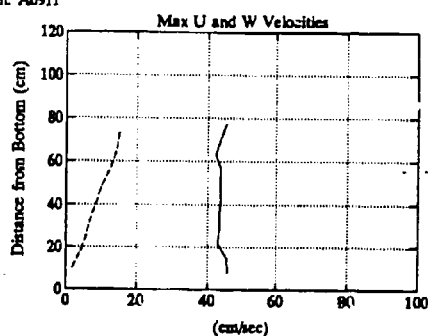
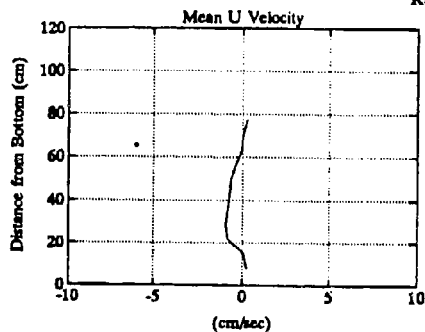




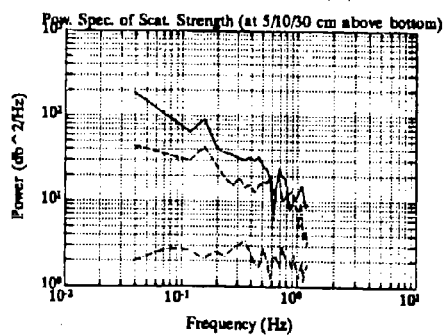
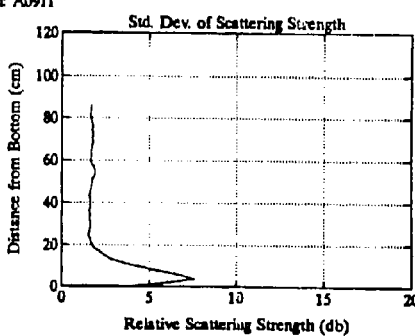
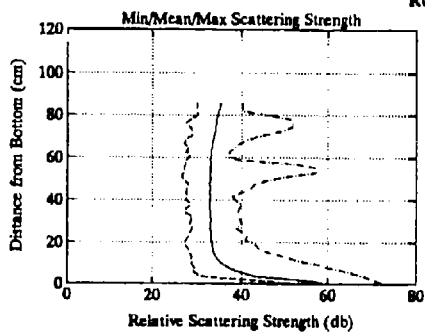




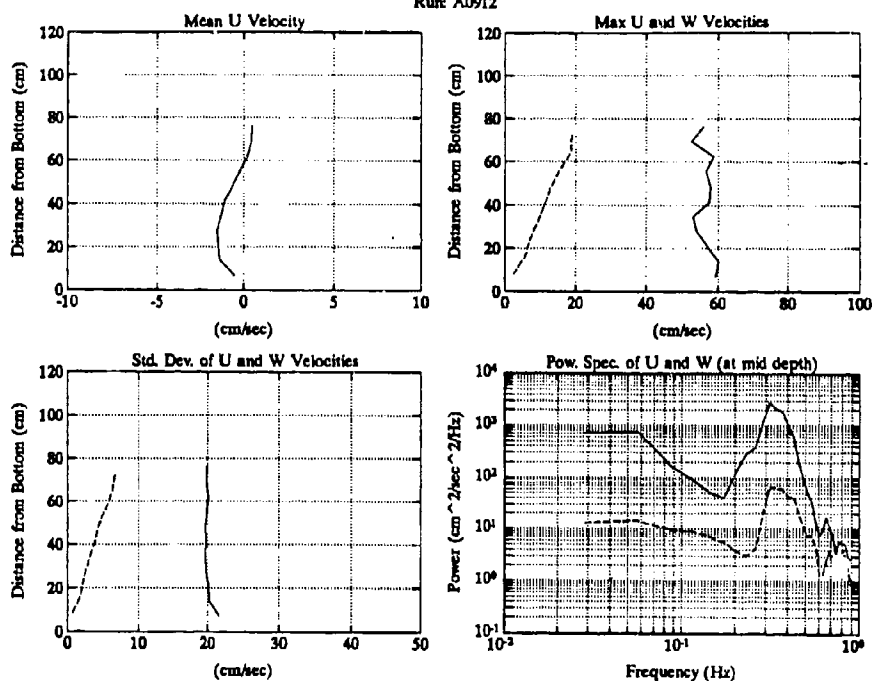
Run: A0911



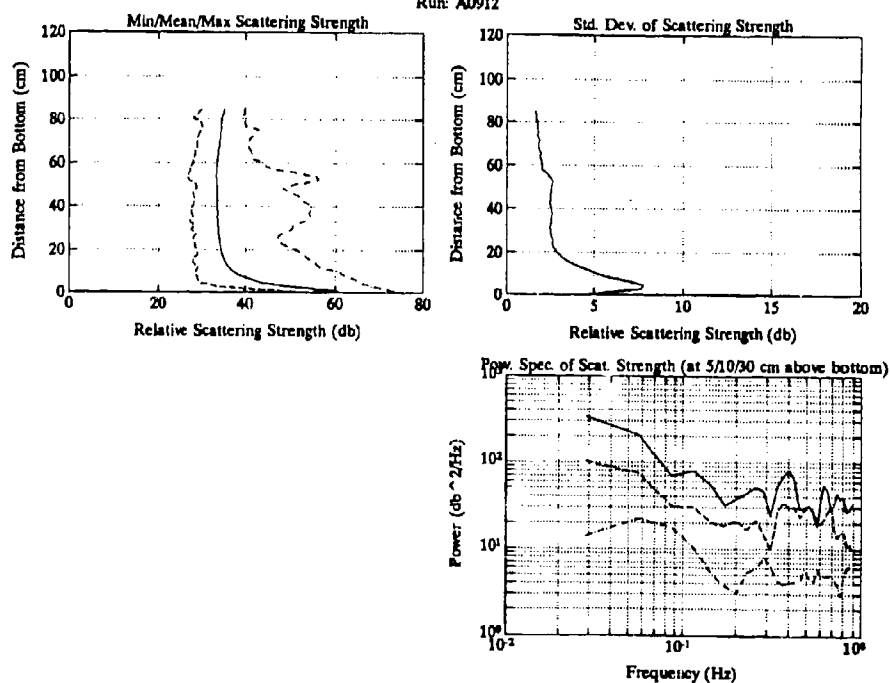
Run: A0911



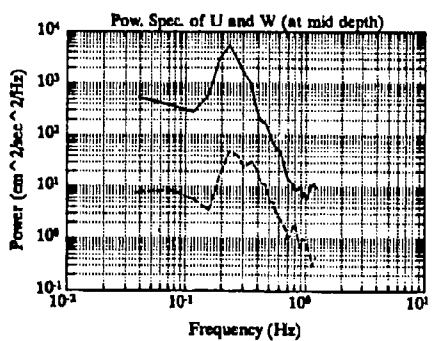
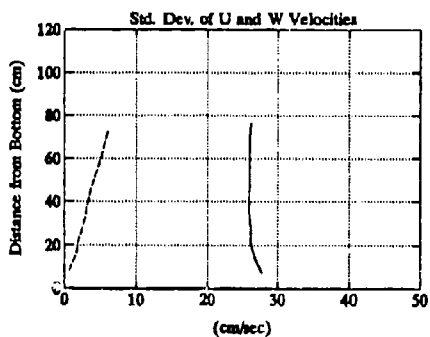
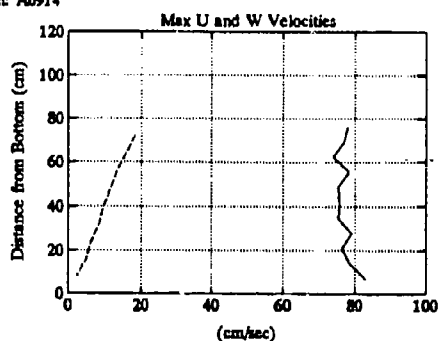
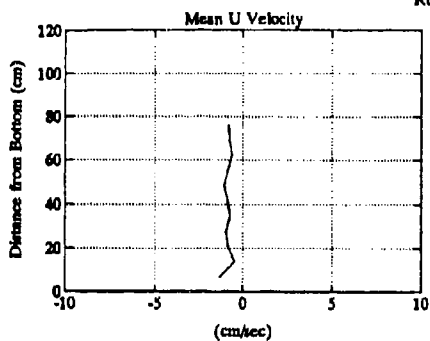
Run: A0912



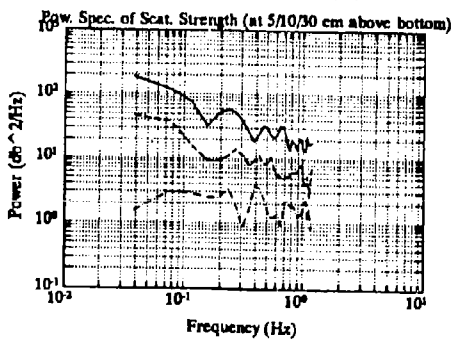
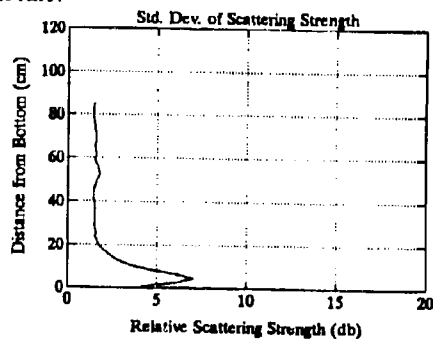
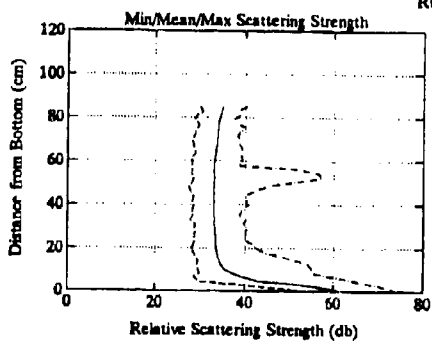
Run: A0912



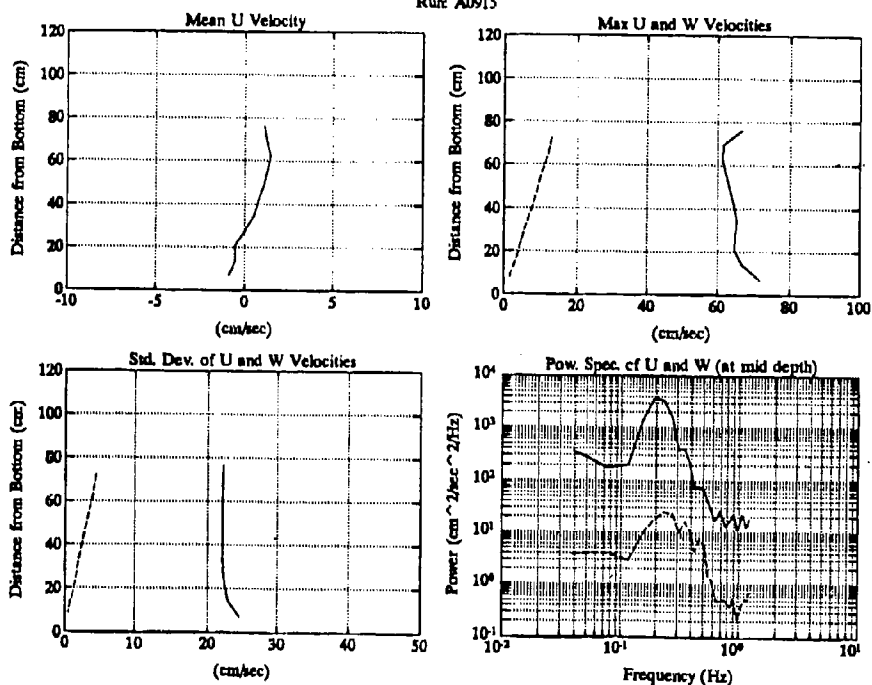
Run: A0914



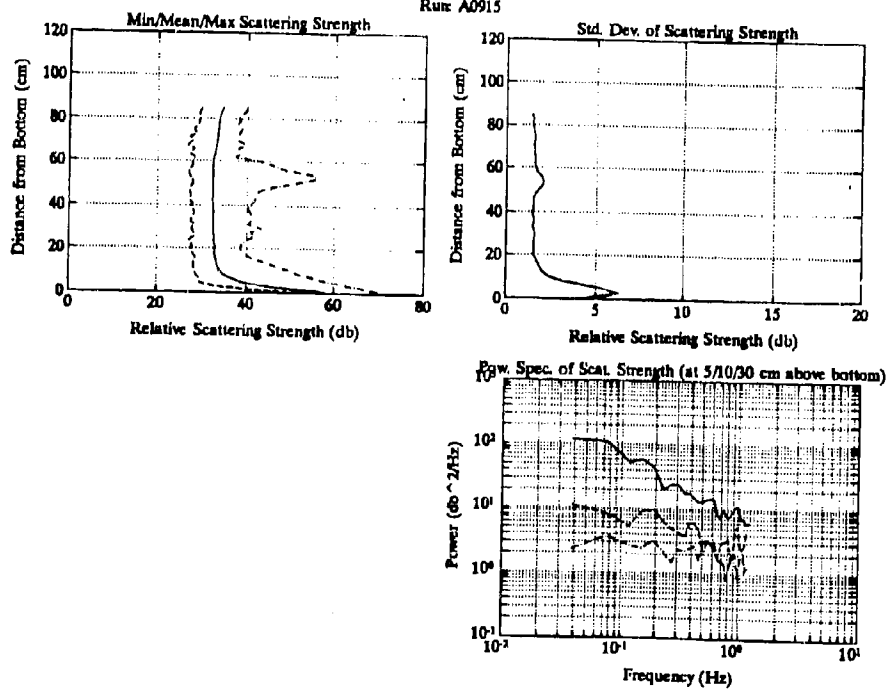
Run: A0914

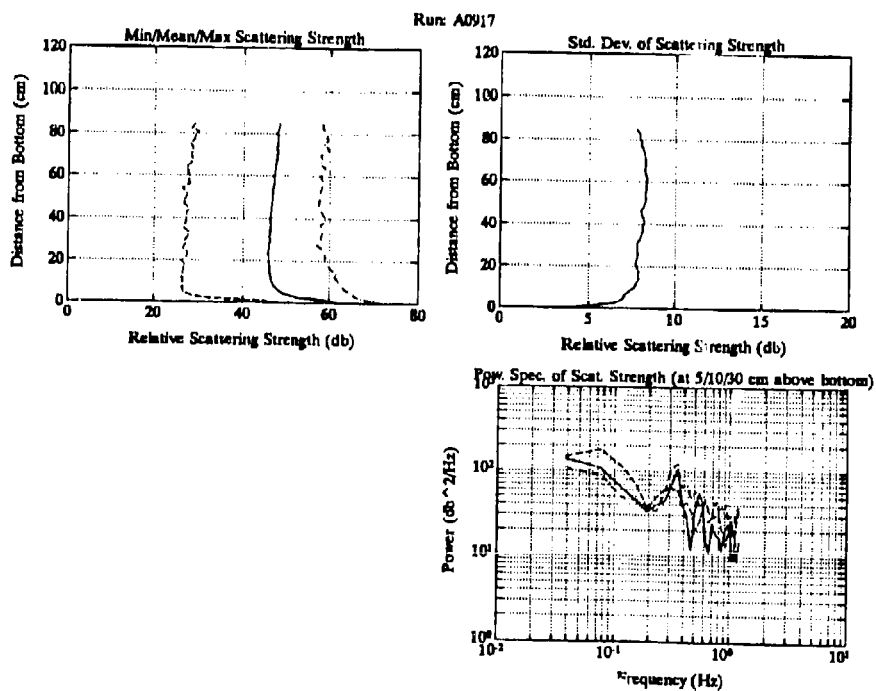
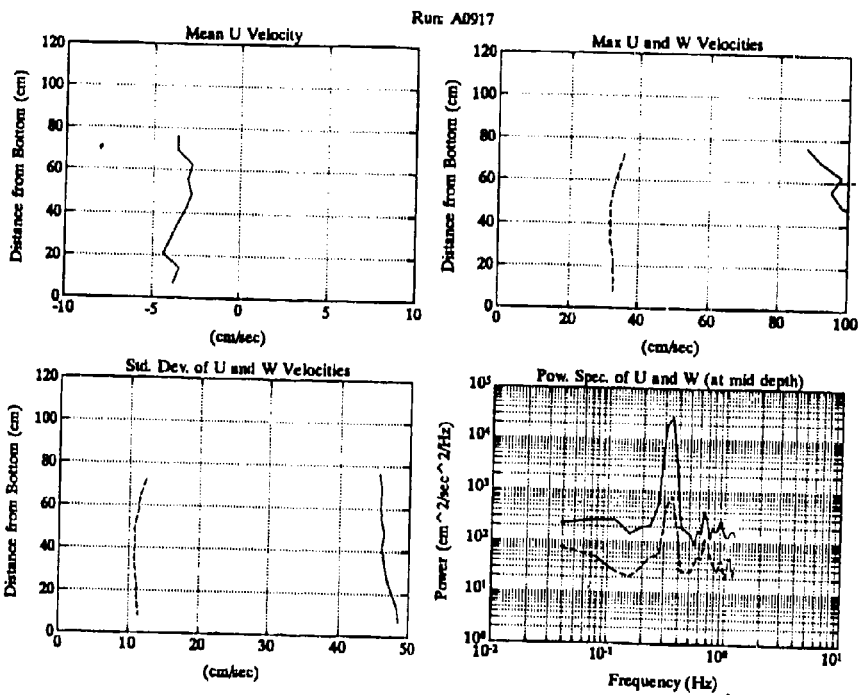


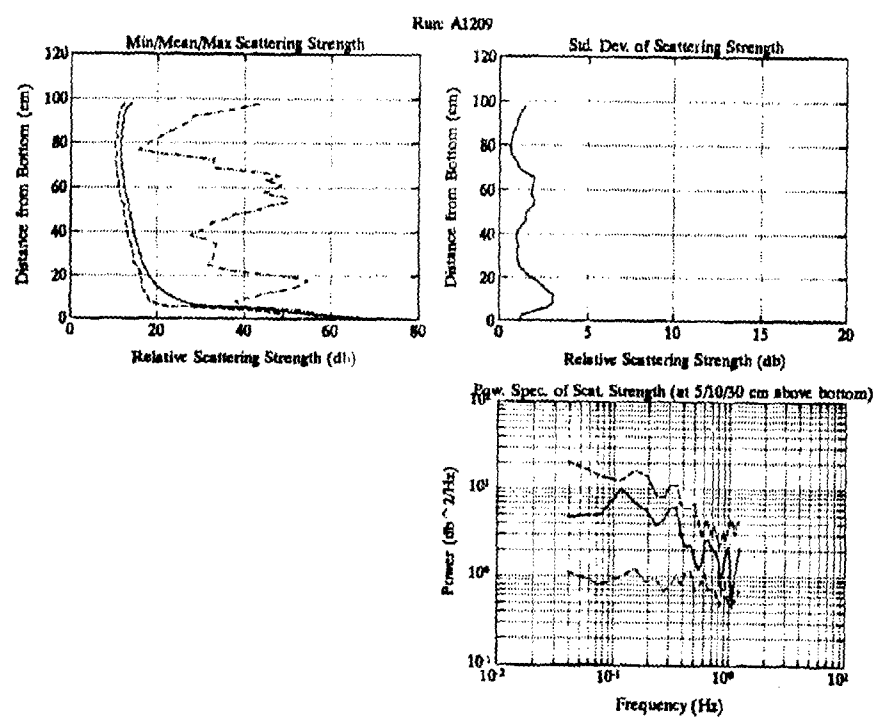
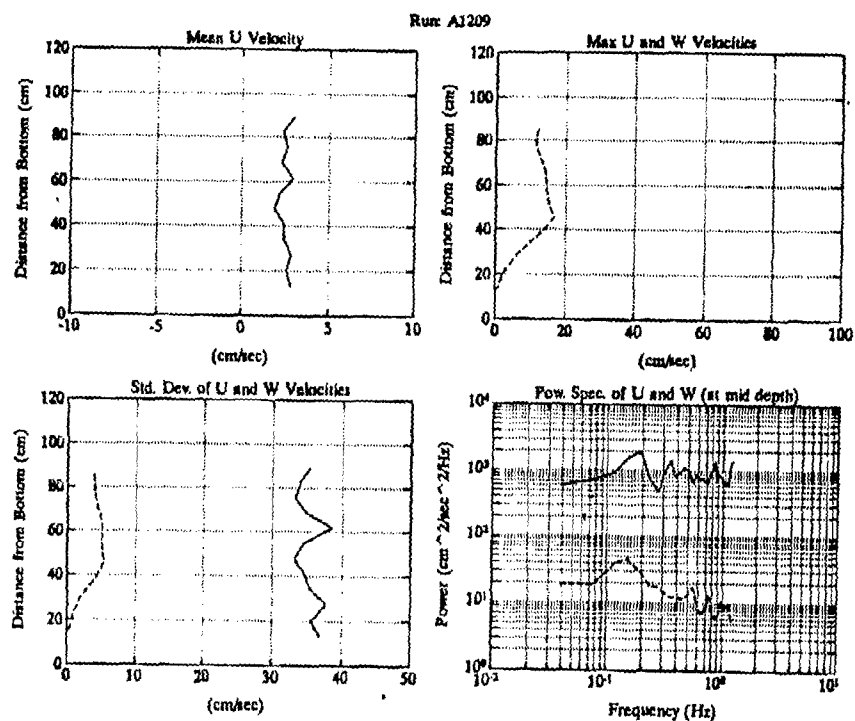
Run: A0915

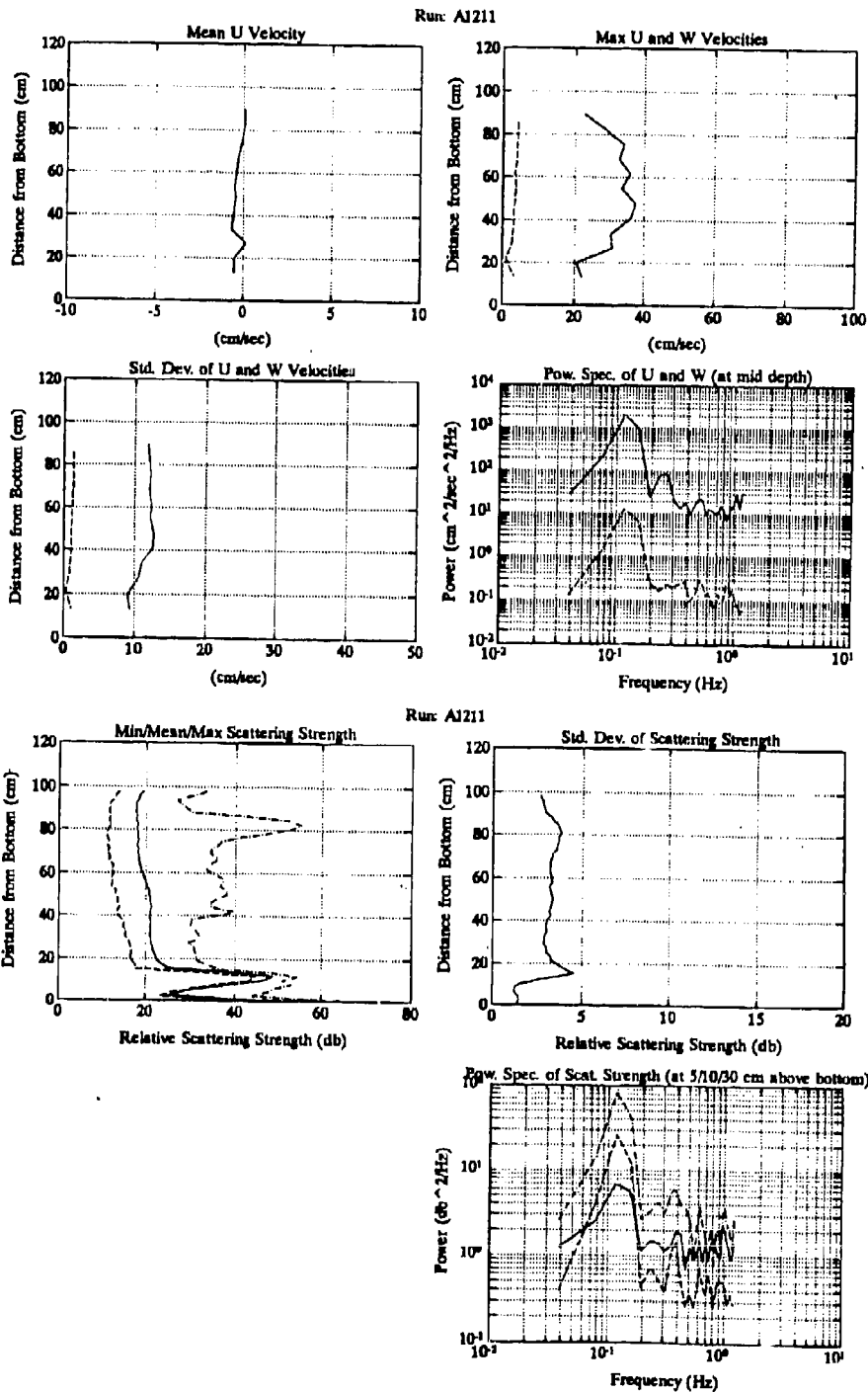


Run: A0915

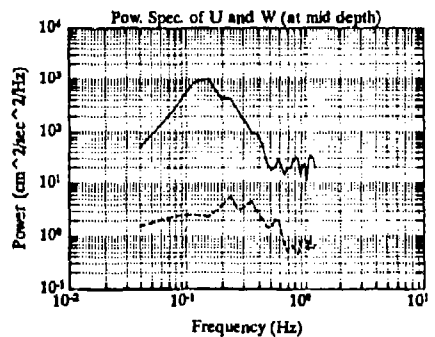
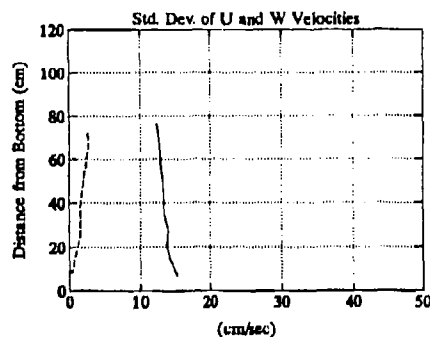
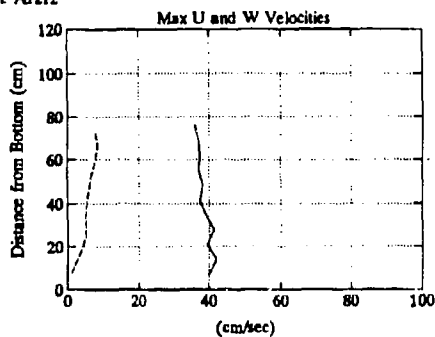
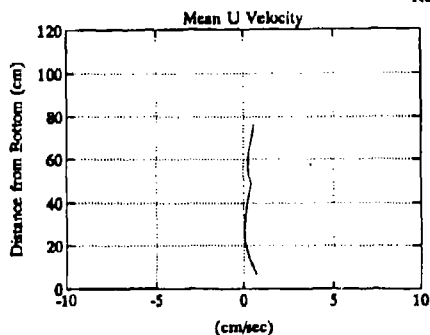




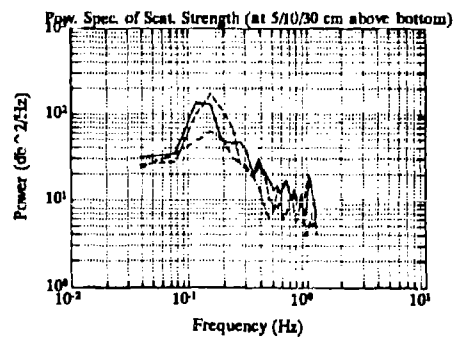
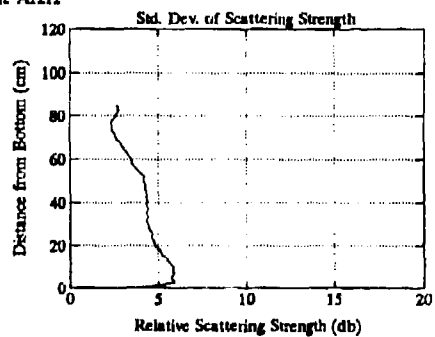
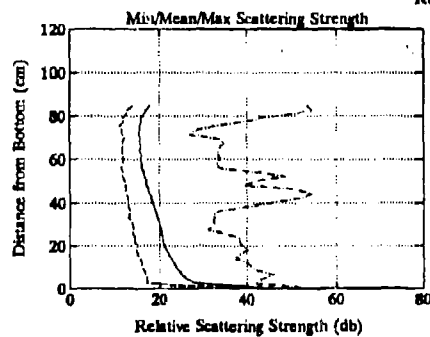




Run: A1212

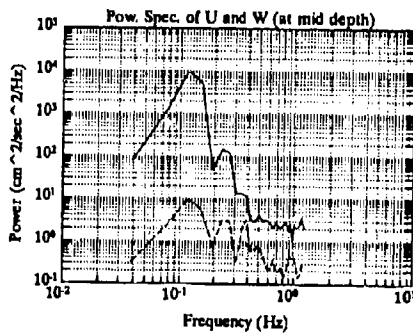
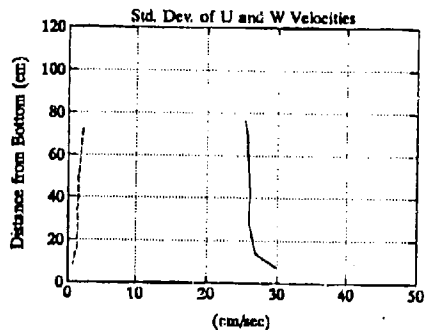
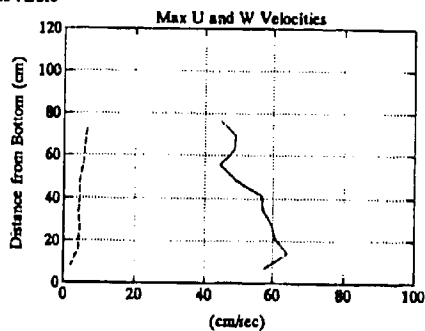
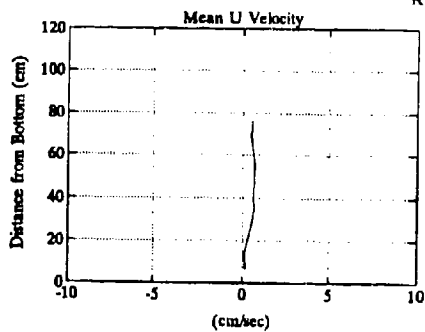


Run: A1212

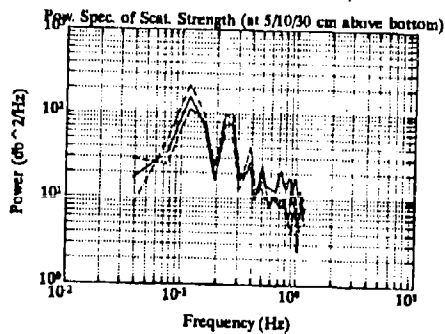
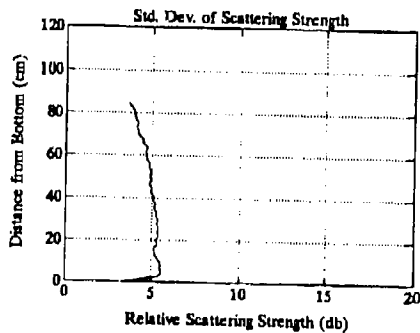
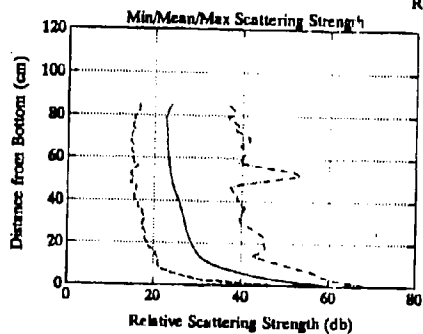




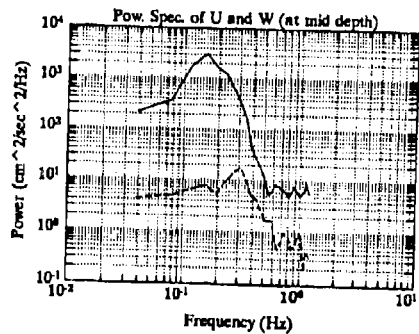
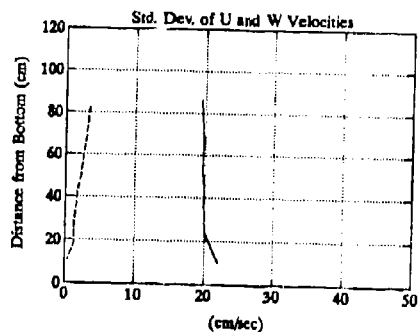
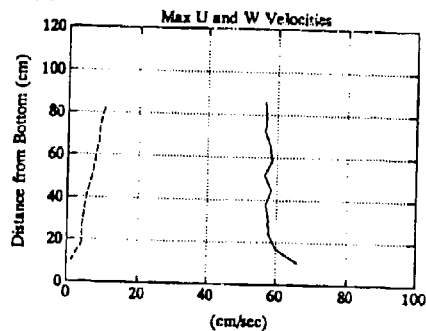
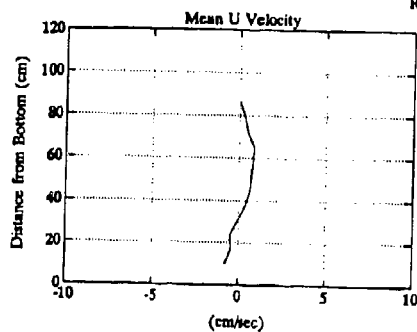
Run: A1213



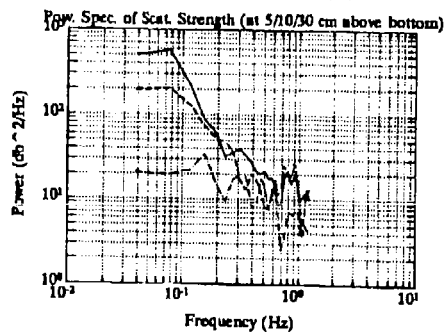
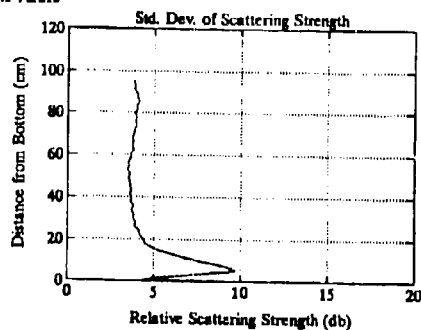
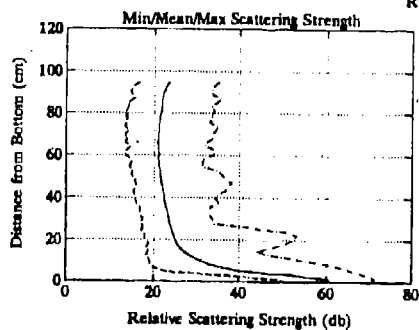
Run: A1213



Run: A1215



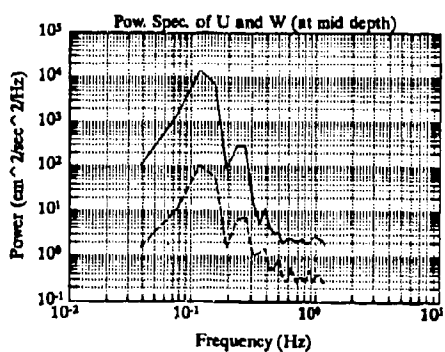
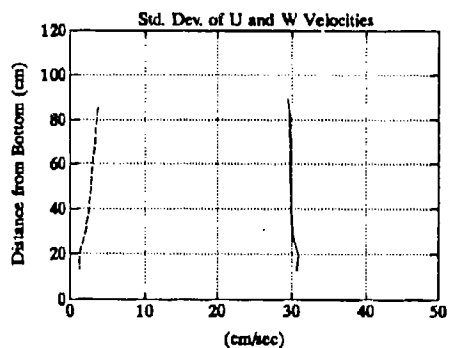
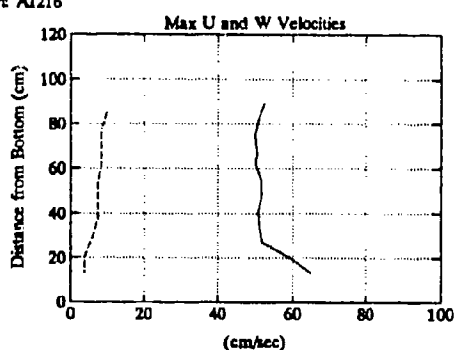
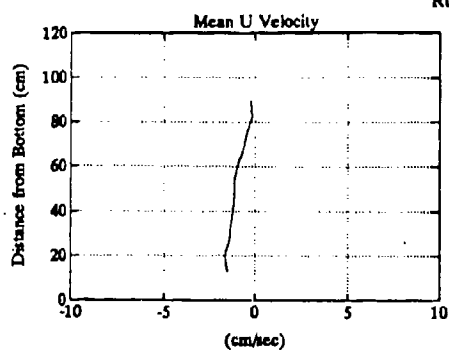
Run: A1215



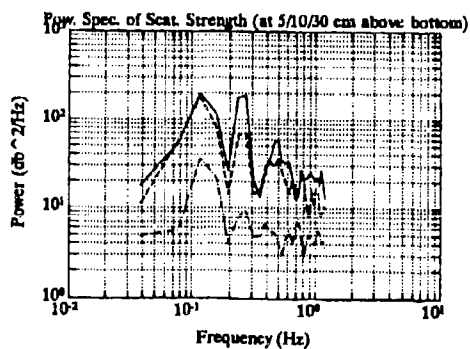
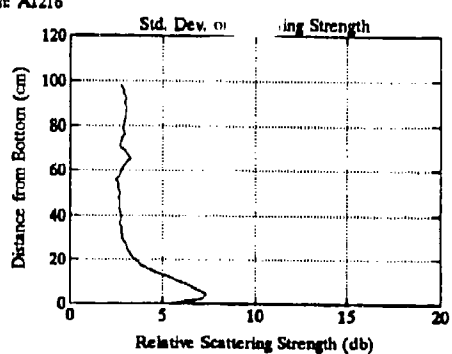
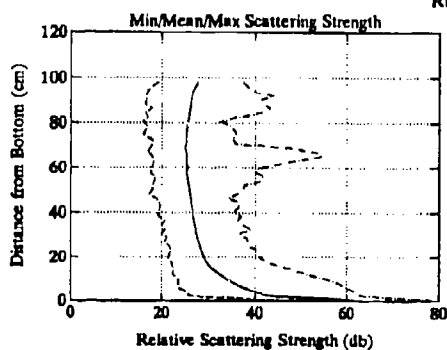
H42

Appendix H Acoustic-Doppler Current Profiler Data

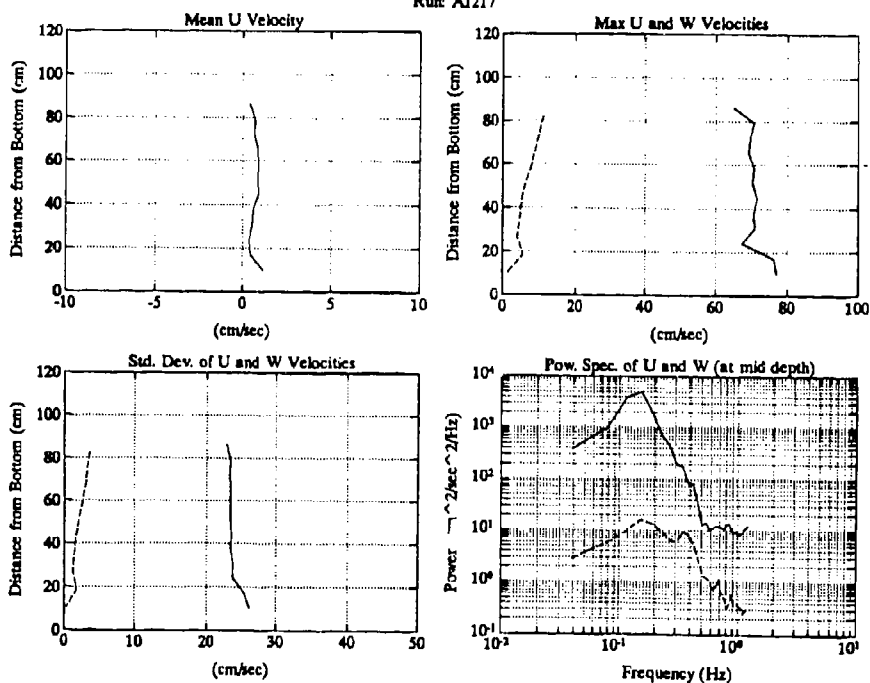
Run: A1216



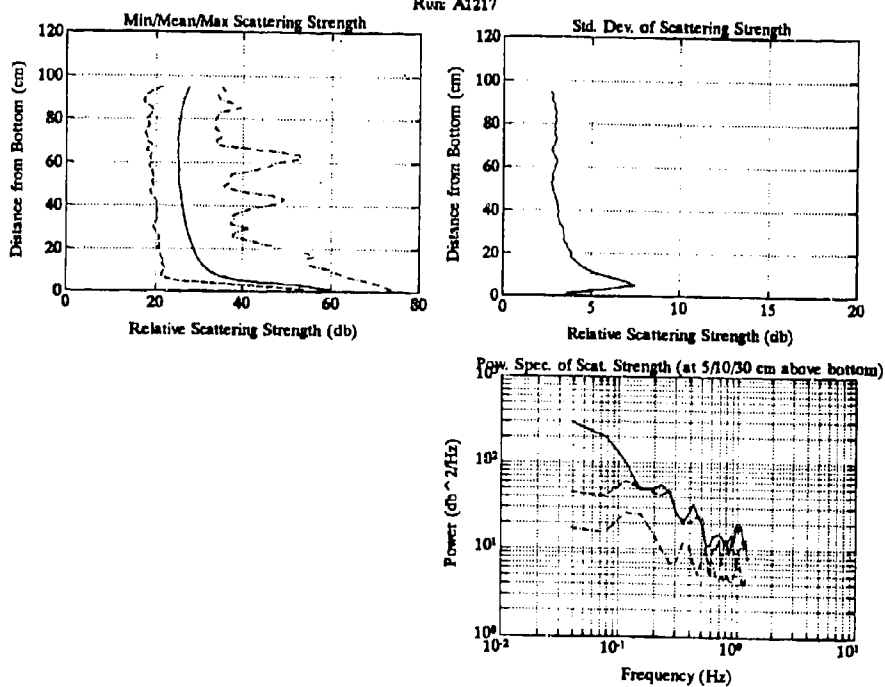
Run: A1216



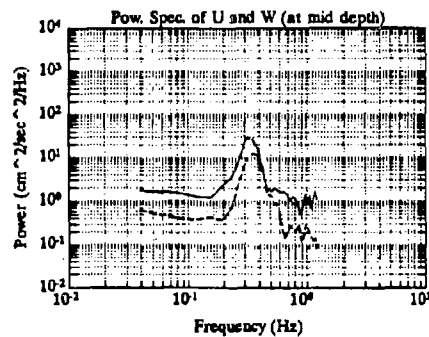
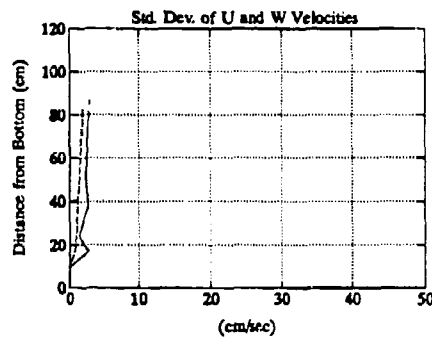
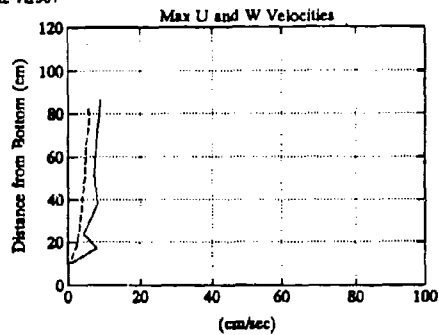
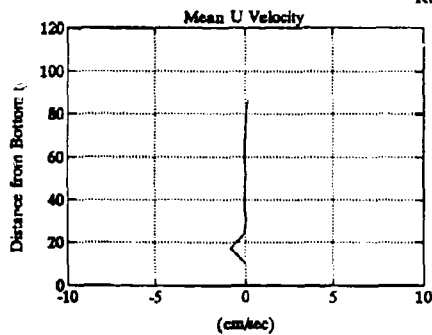
Run: A1217



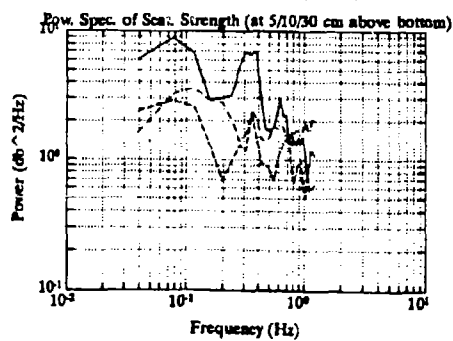
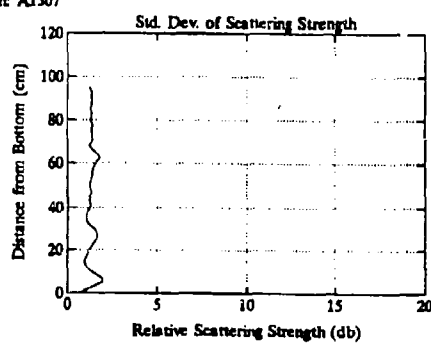
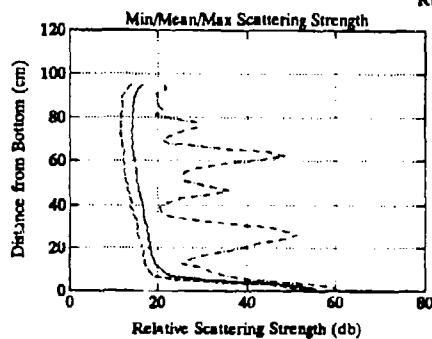
Run: A1217

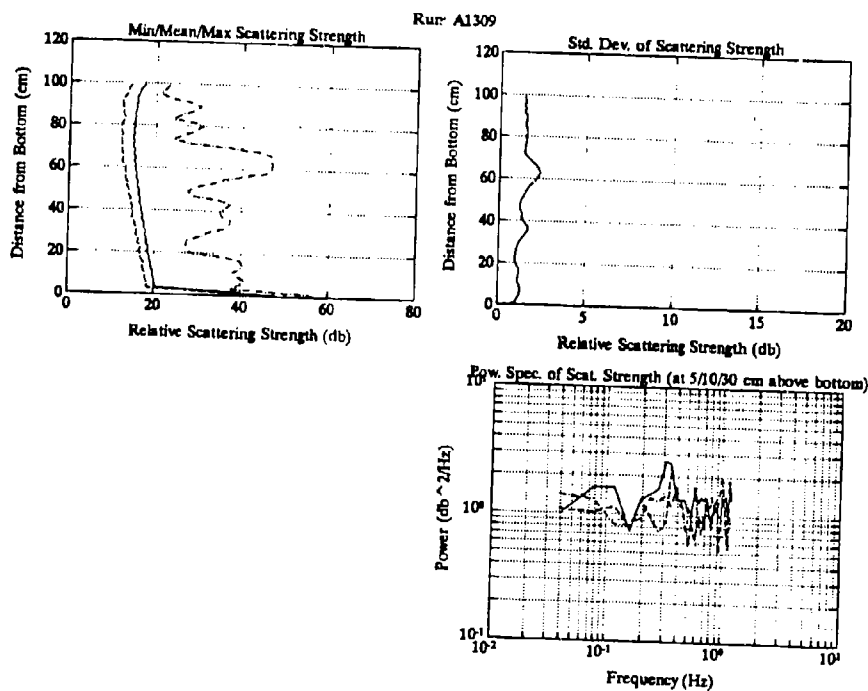
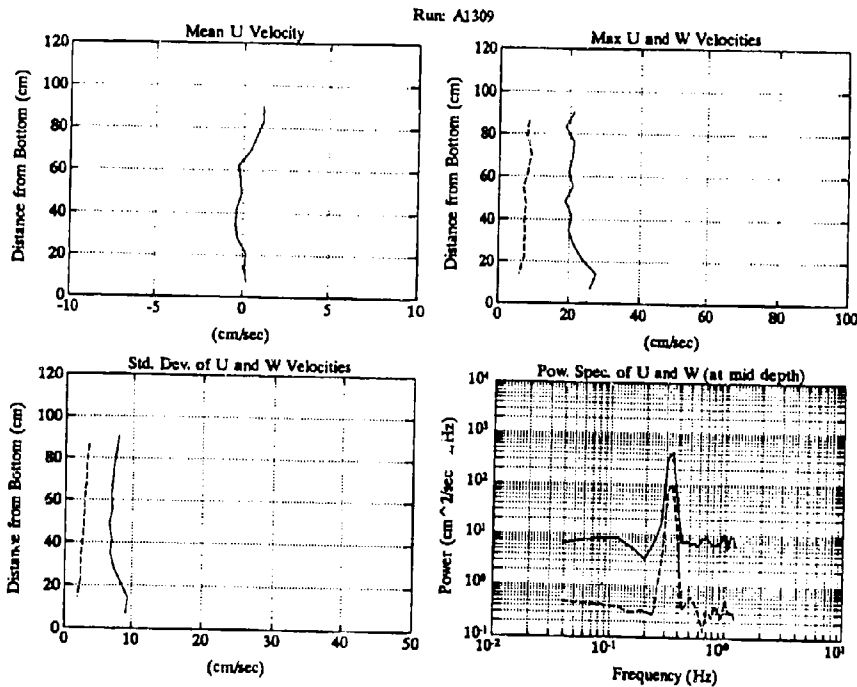


Run: A1307

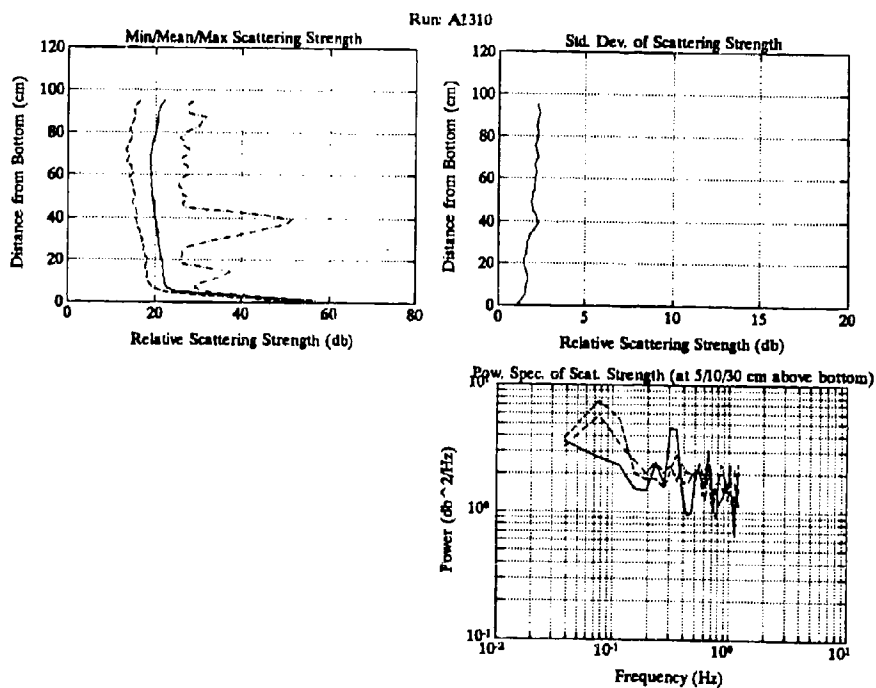
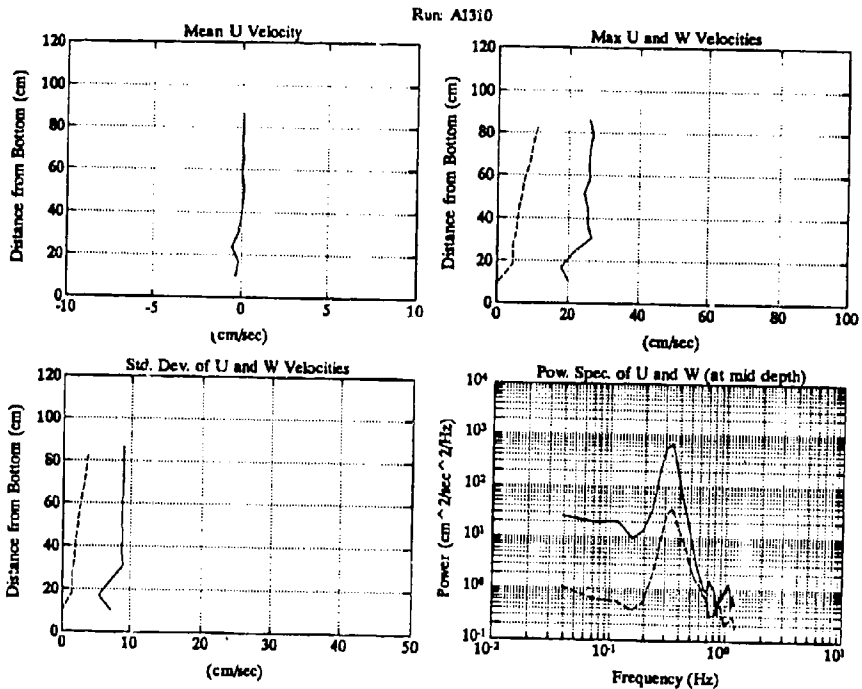


Run: A1307

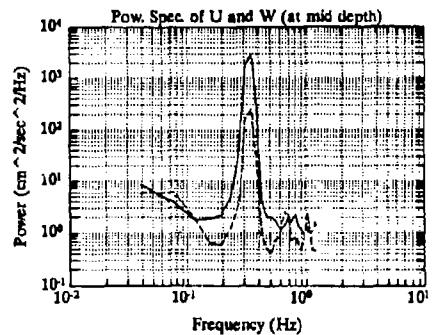
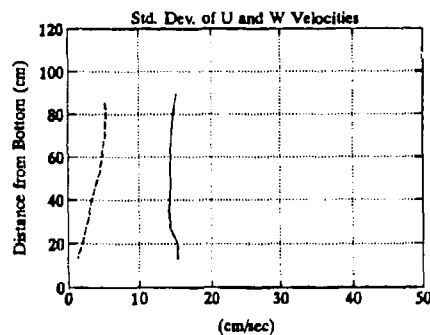
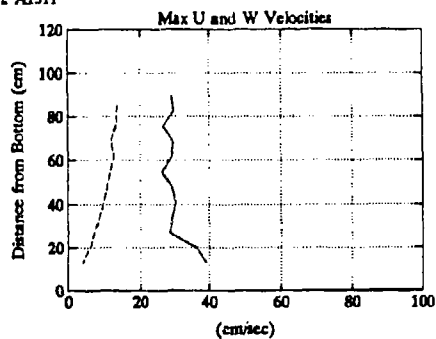
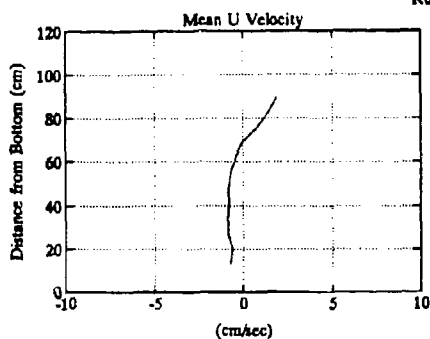




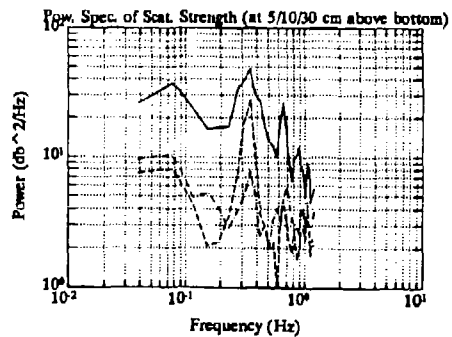
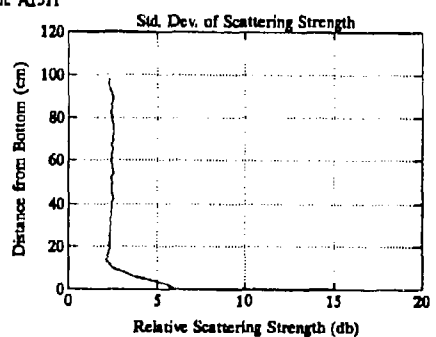
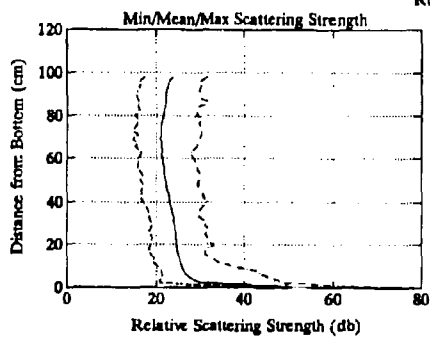
H46



Run: A1311

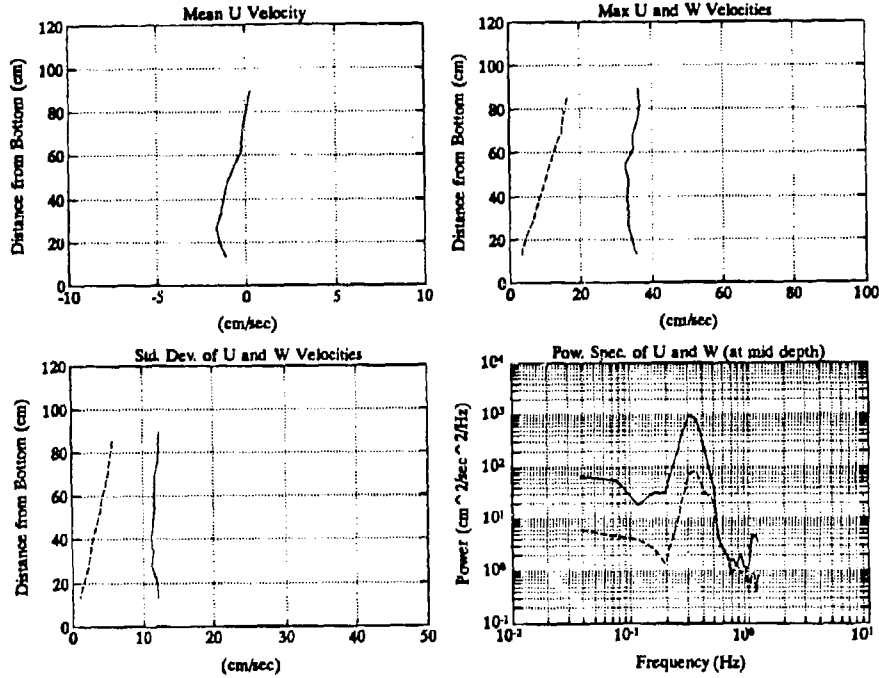


Run: A1311

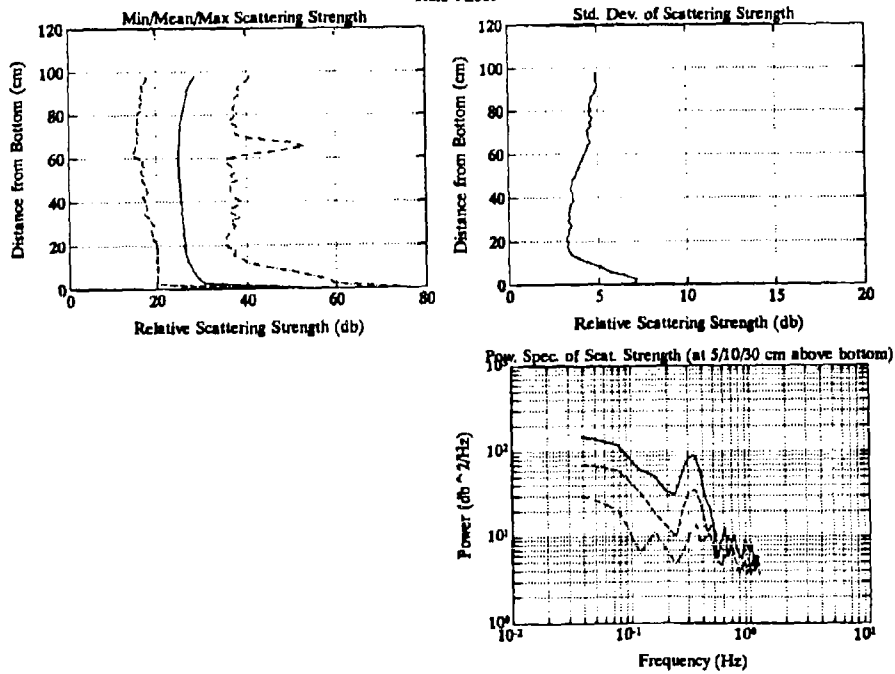


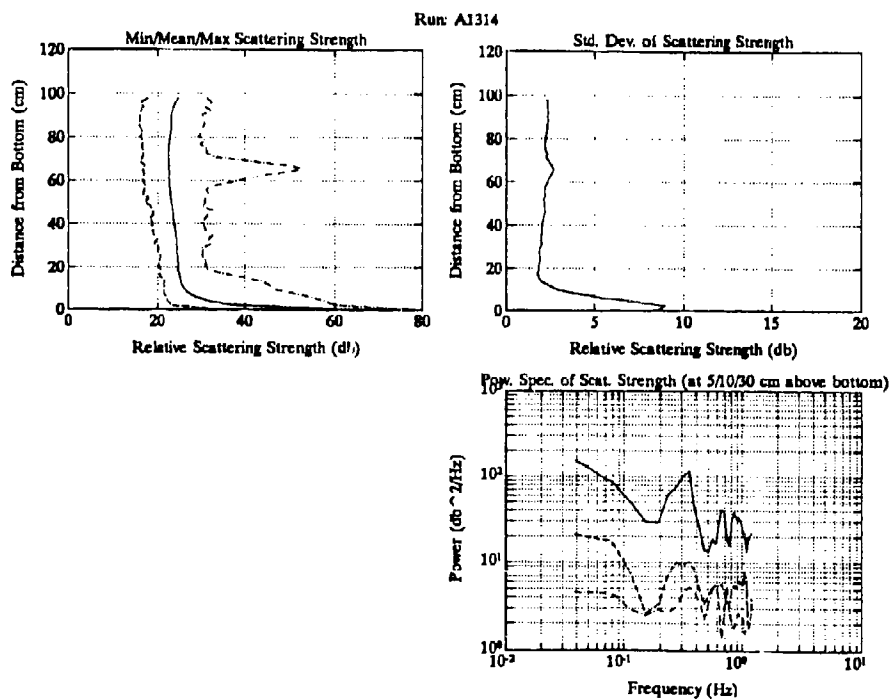
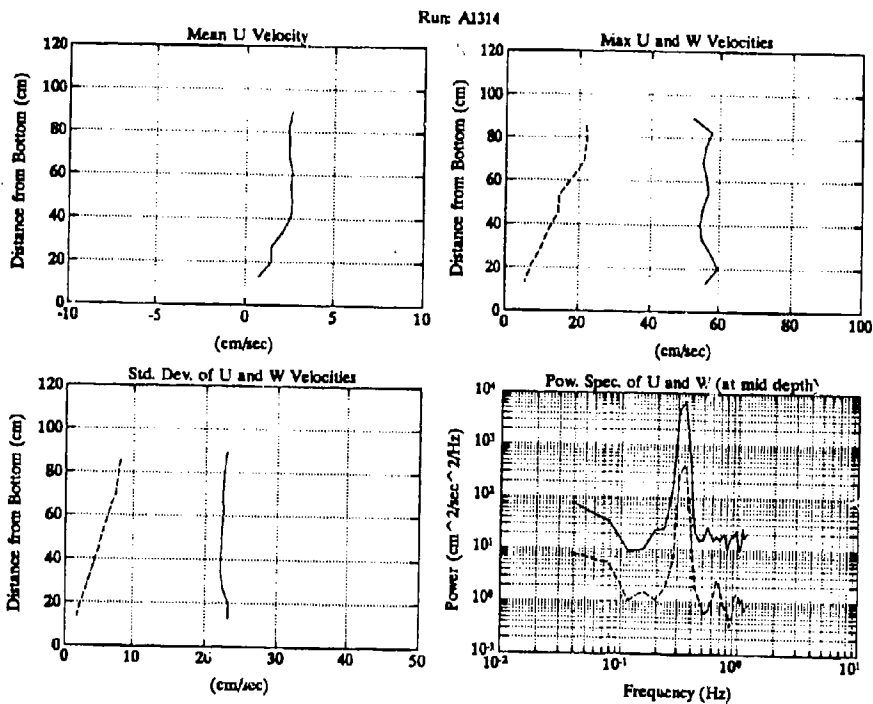


Run: A1313



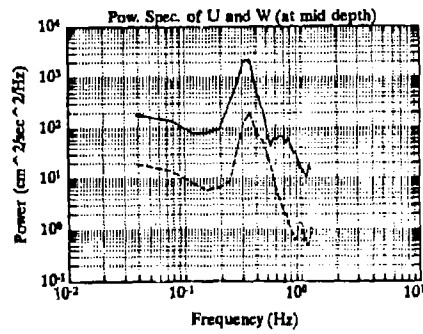
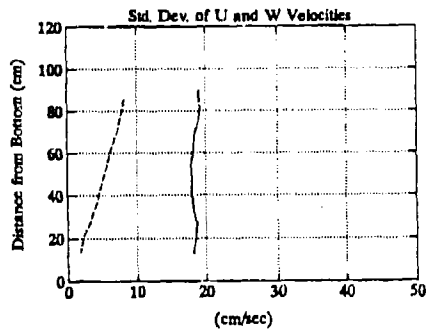
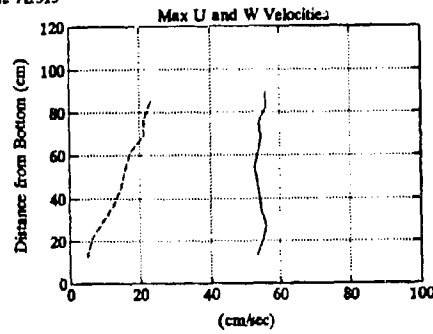
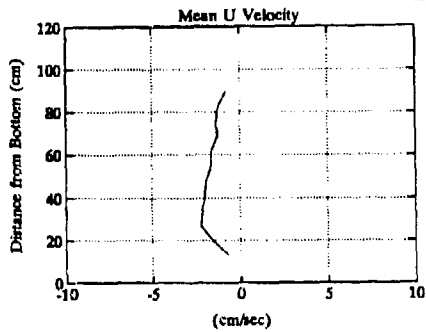
Run: A1313



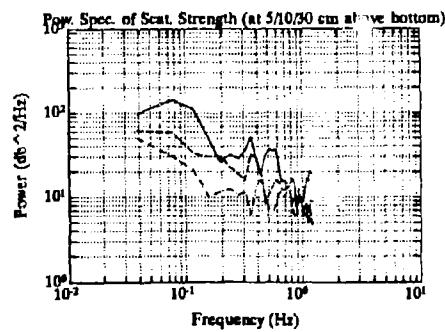
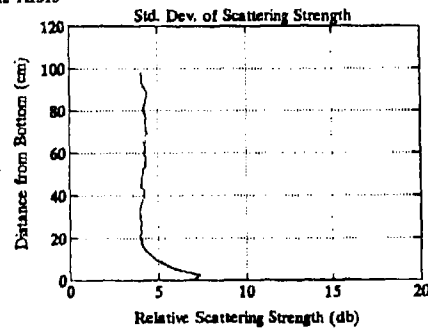
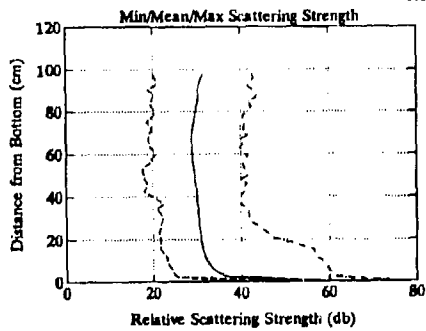


H50

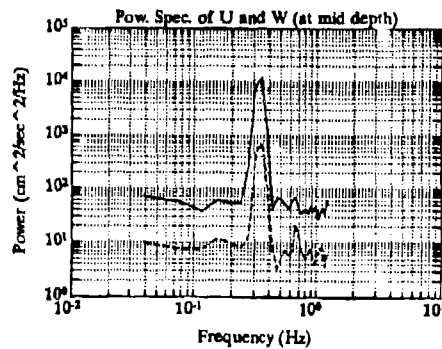
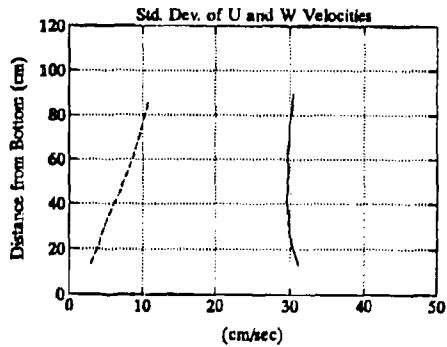
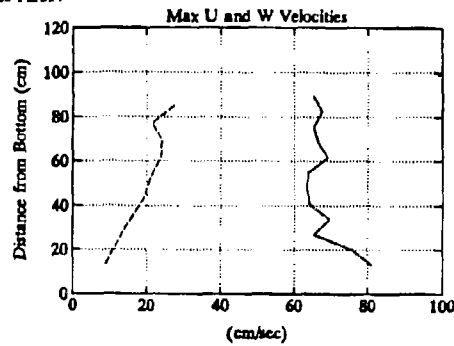
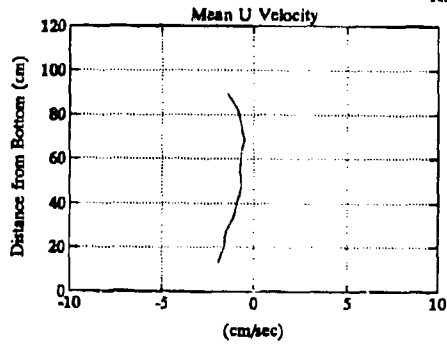
Run: A1315



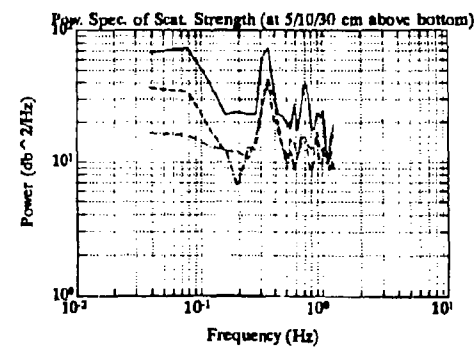
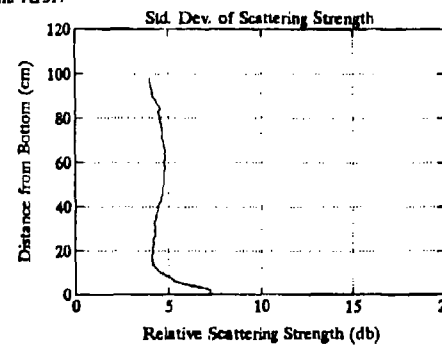
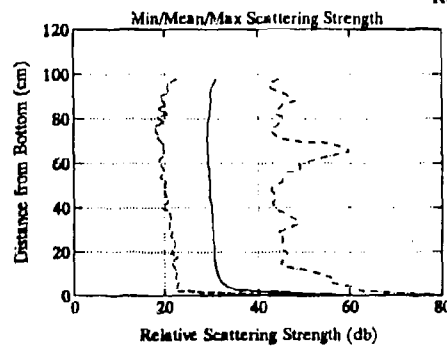
Run: A1315



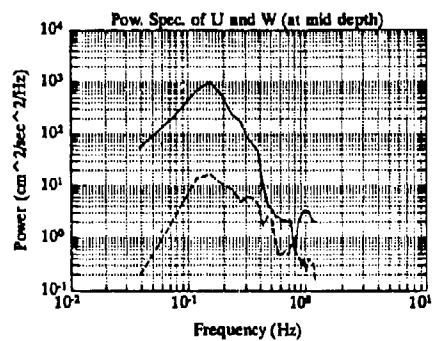
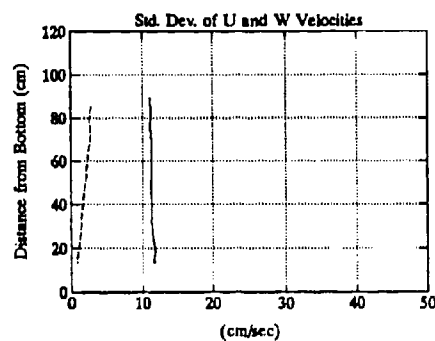
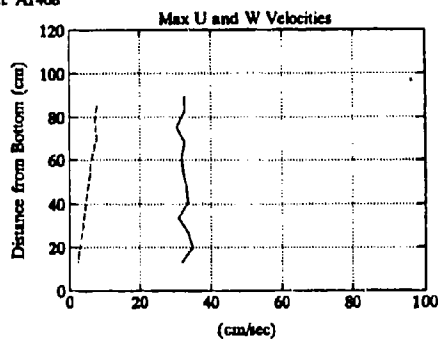
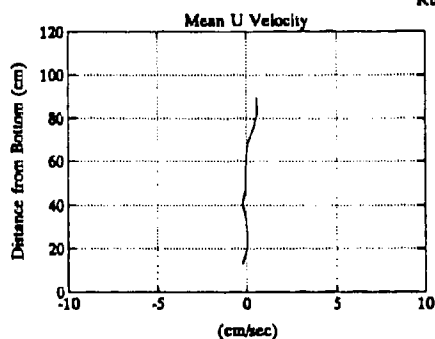
Run: A1317



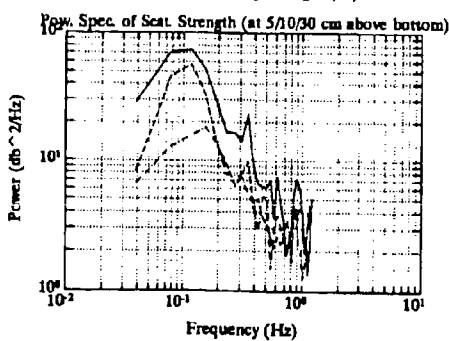
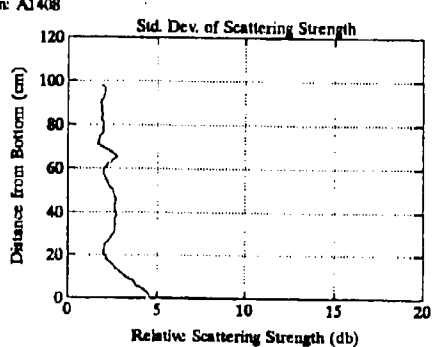
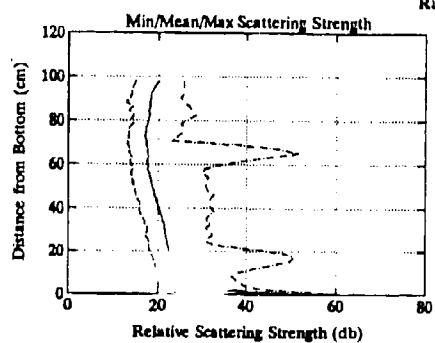
Run: A1317



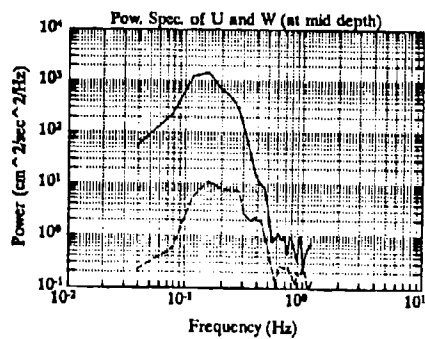
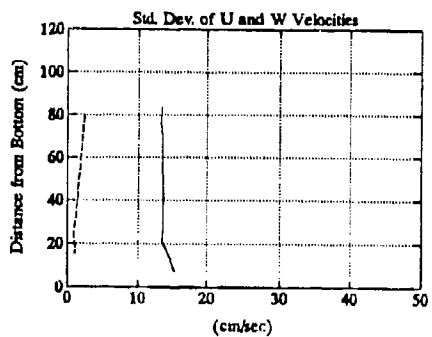
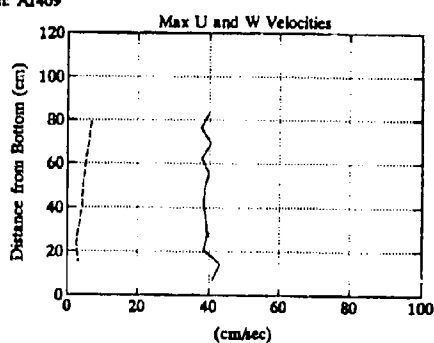
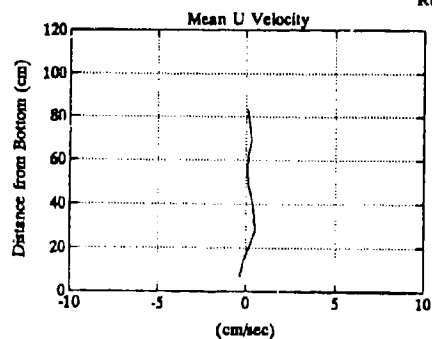
Run: A1408



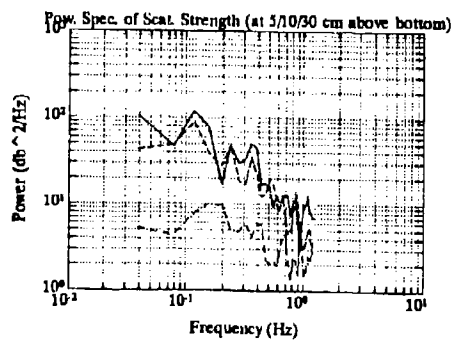
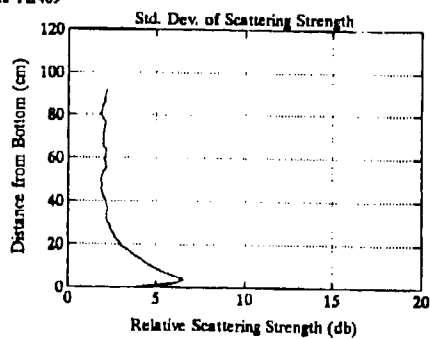
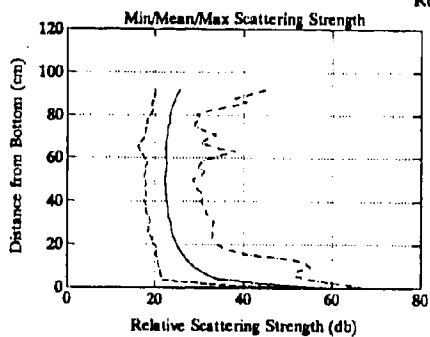
Run: A1408



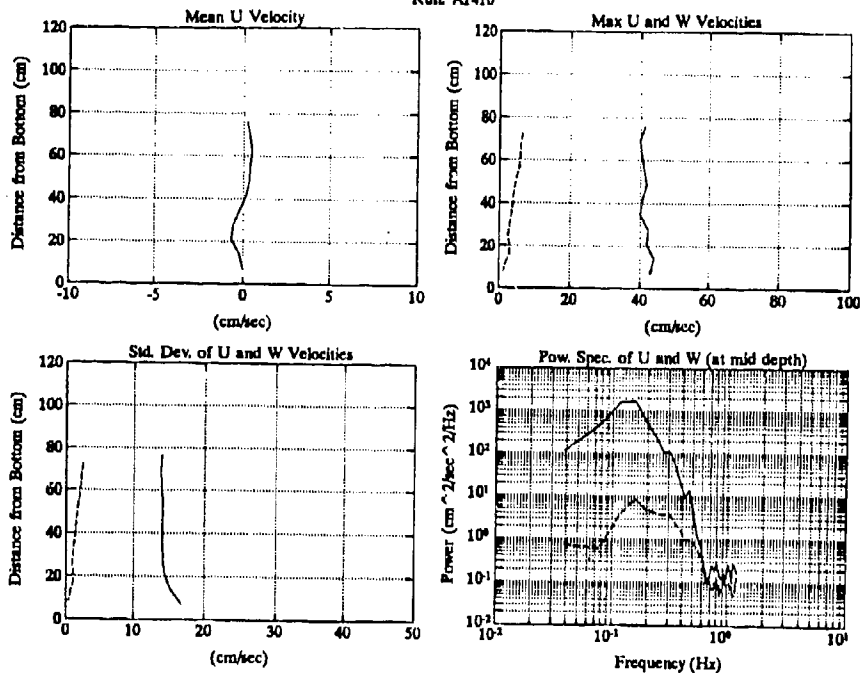
Run: A1409



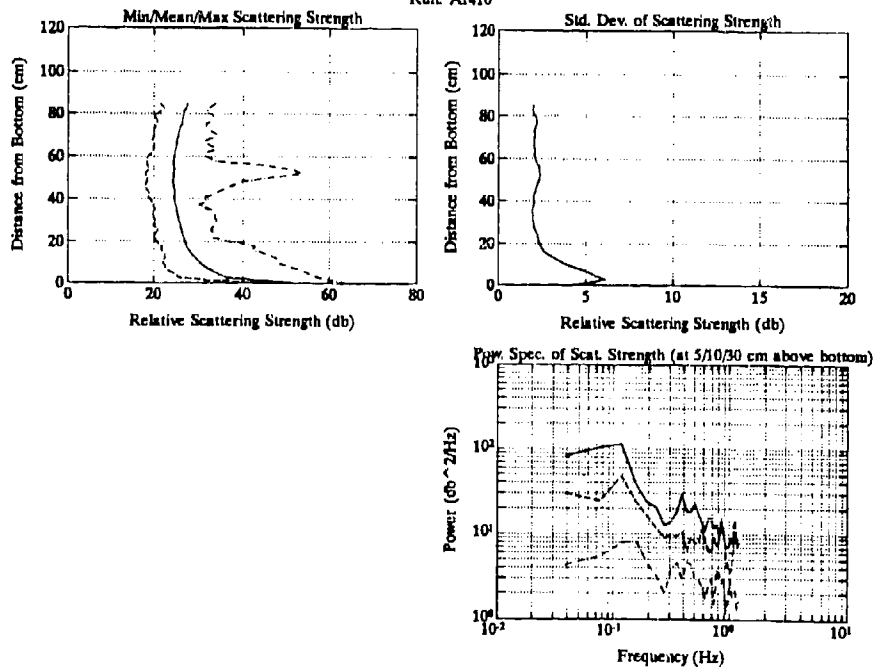
Run: A1409



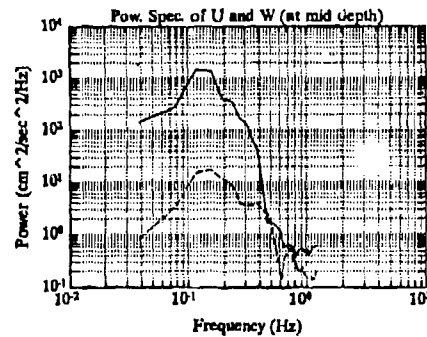
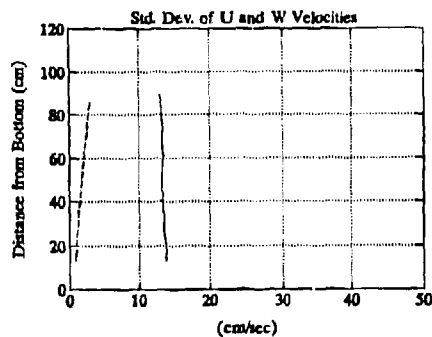
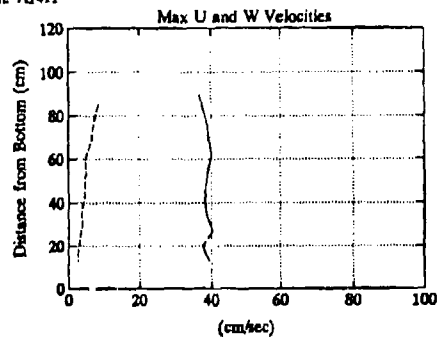
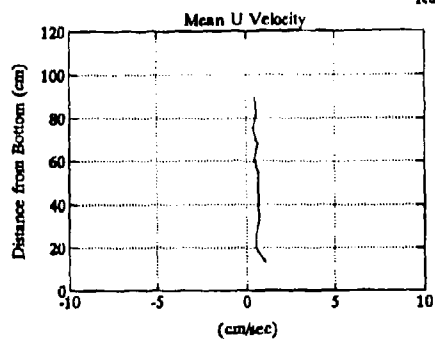
Run: A1410



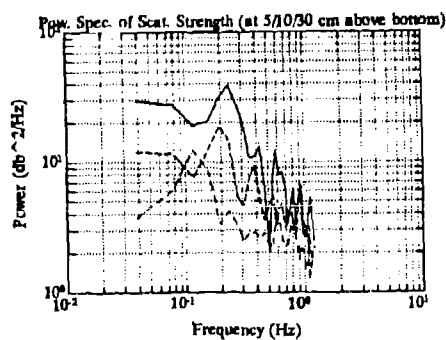
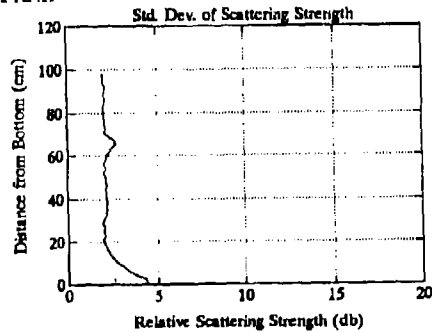
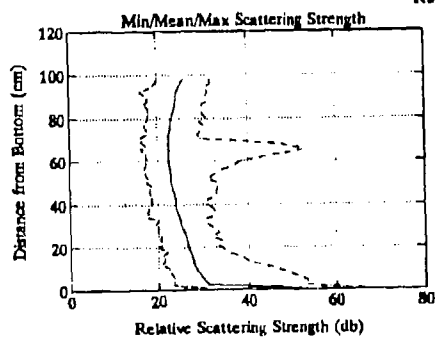
Run: A1410



Run: A1411

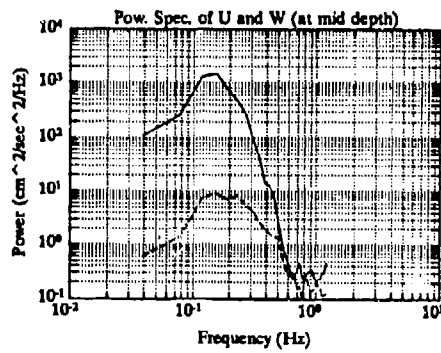
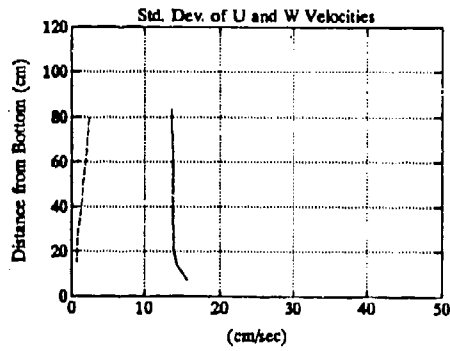
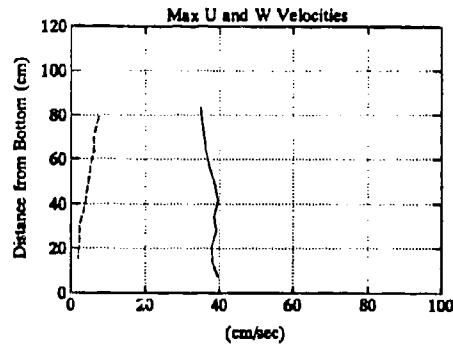
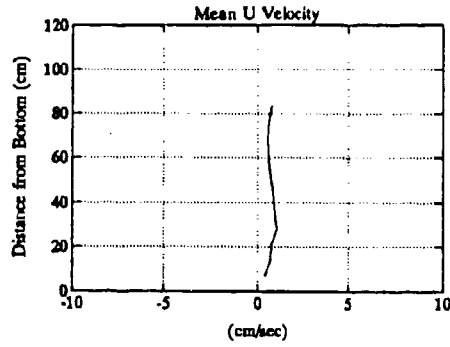


Run: A1411

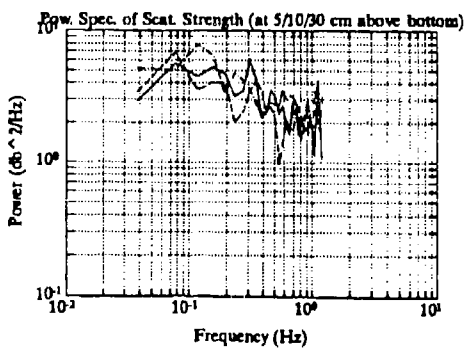
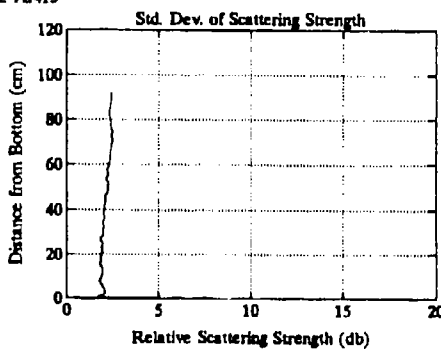
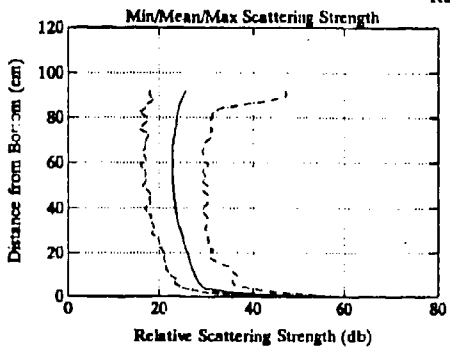




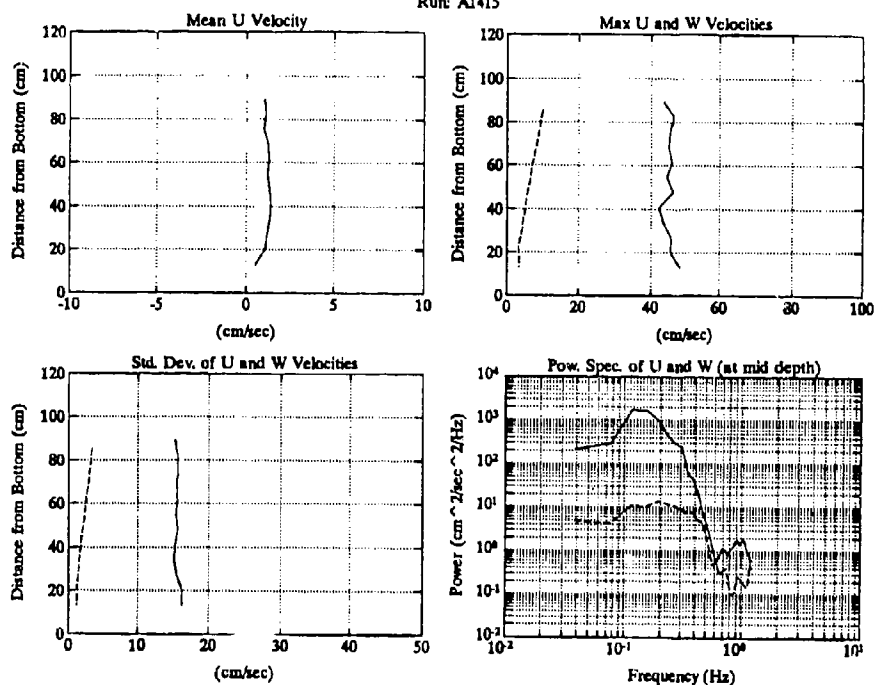
Run: A1413



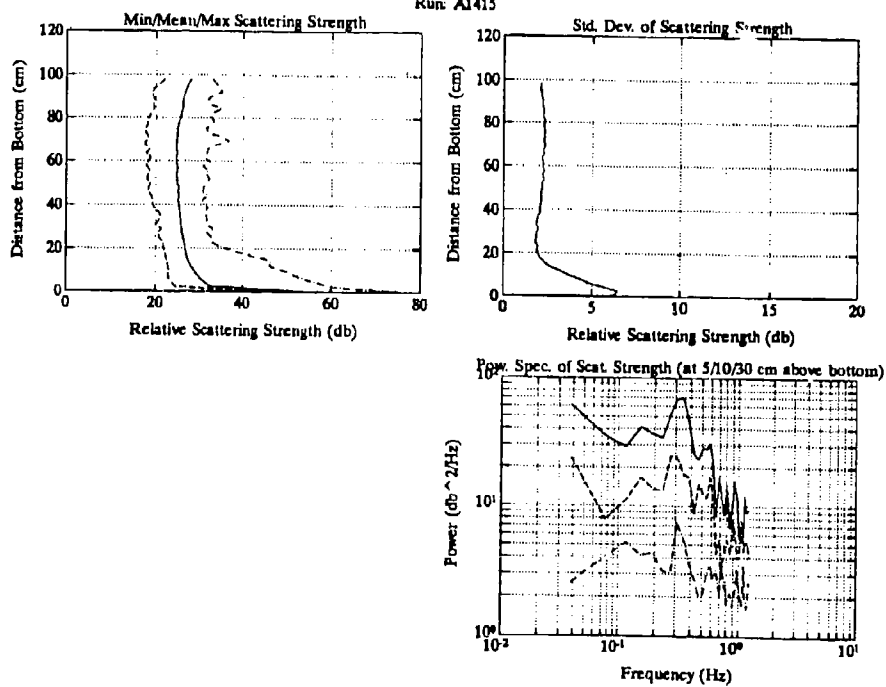
Run: A1413



Run: A1415

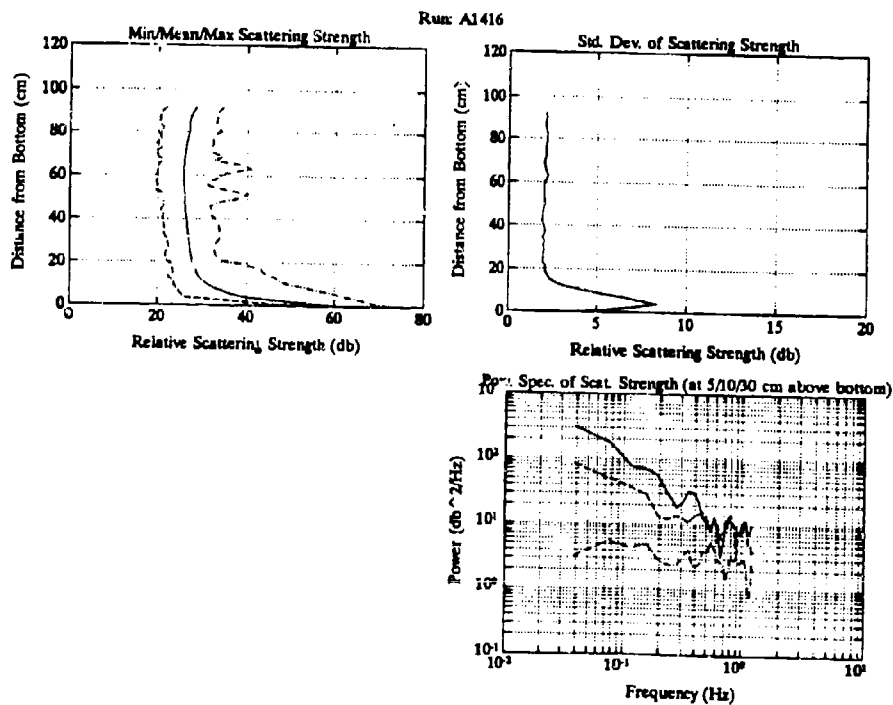
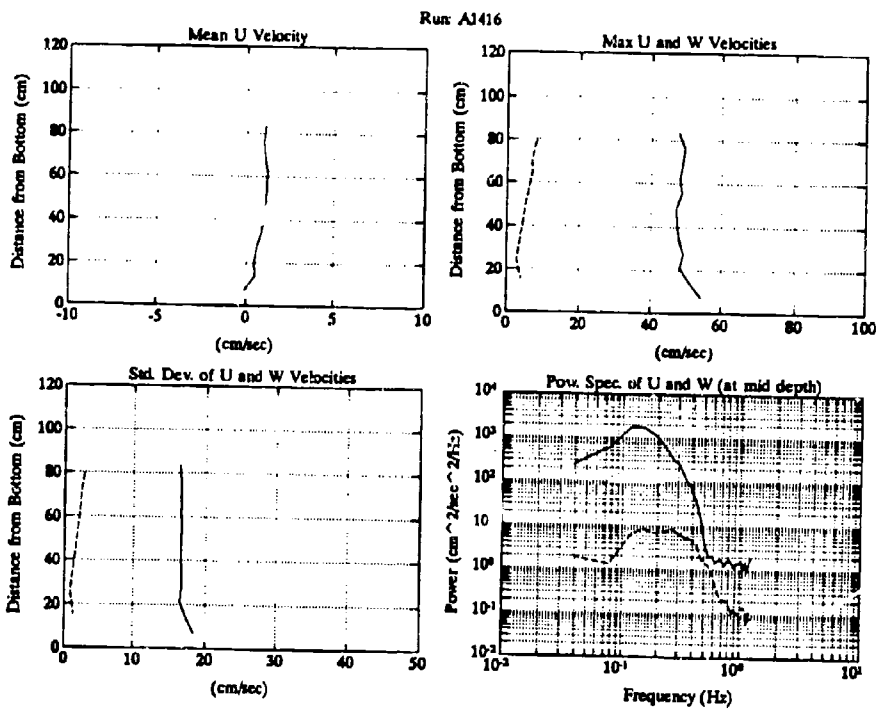


Run: A1415

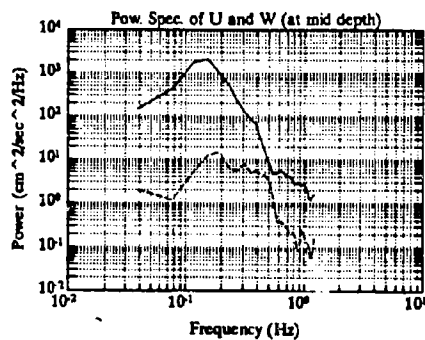
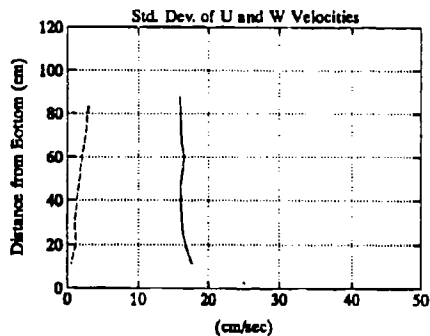
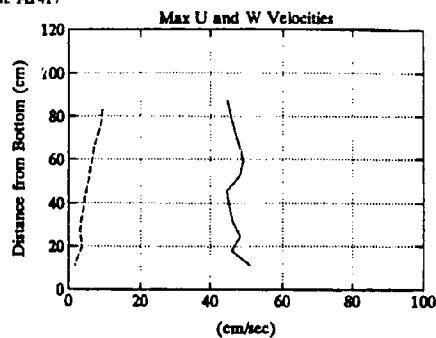
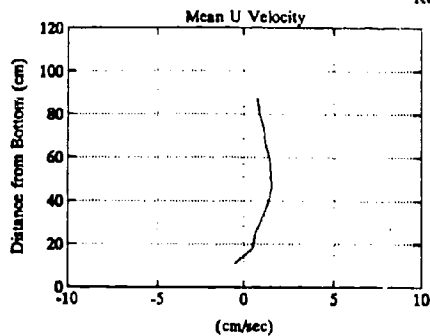


H58

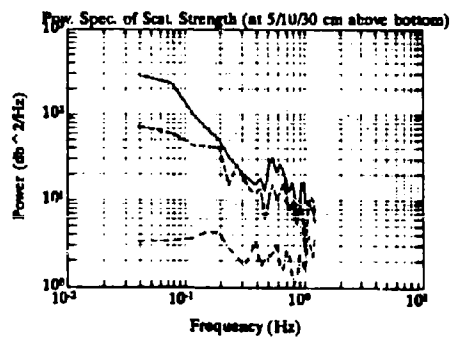
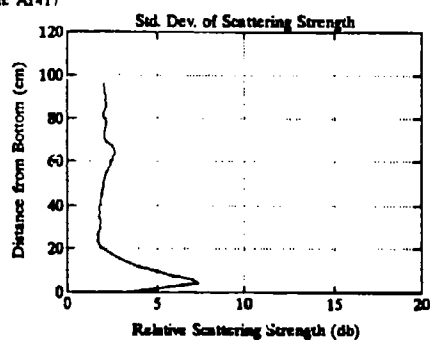
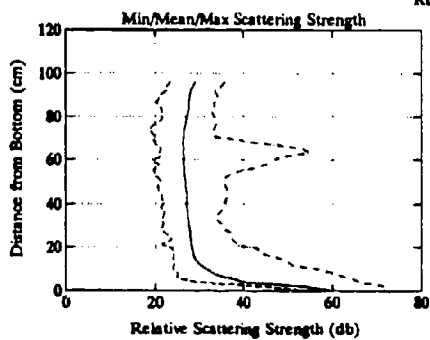
Appendix H Acoustic-Doppler Current Profiler Data



Run: A1417



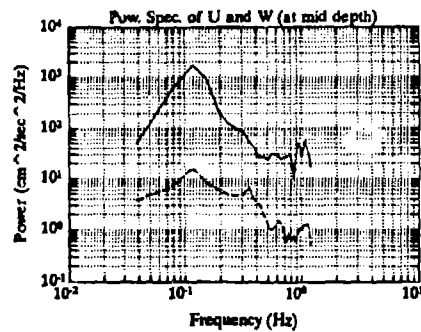
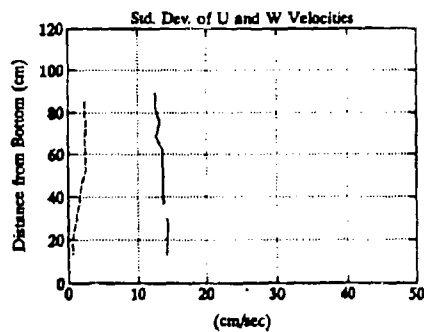
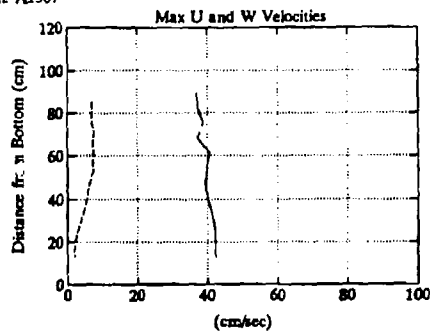
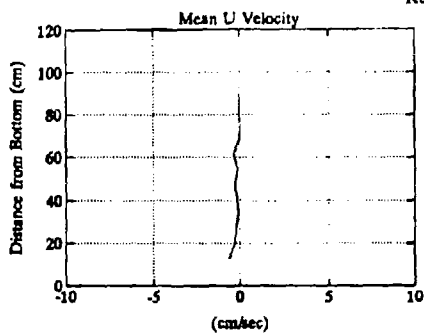
Run: A1417



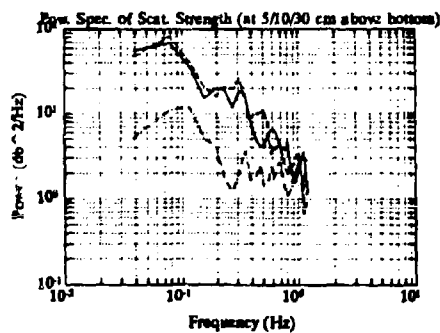
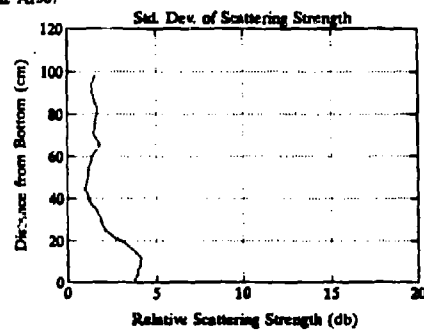
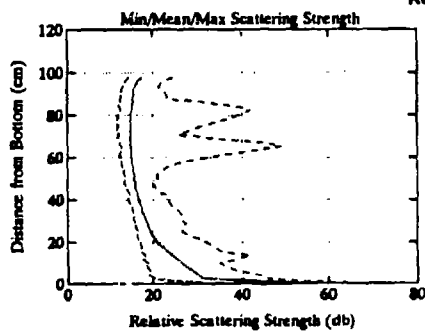
H60

Appendix H Acoustic-Duppler Current Profiler Data

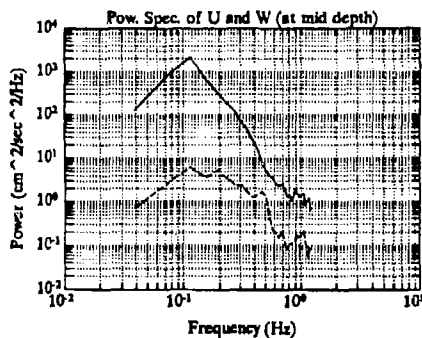
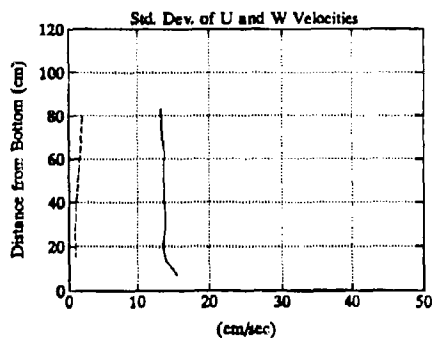
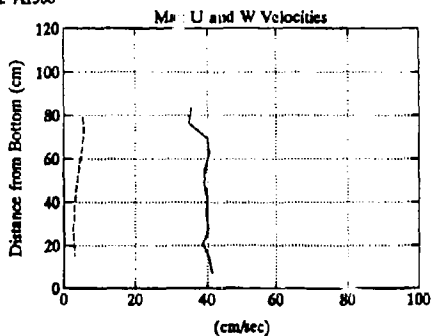
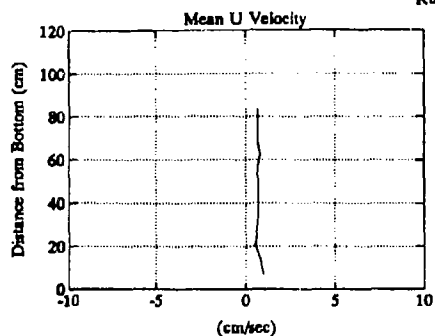
Run: A1507



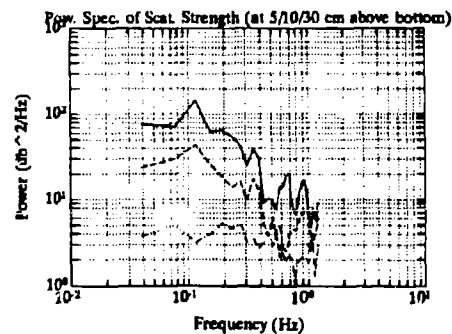
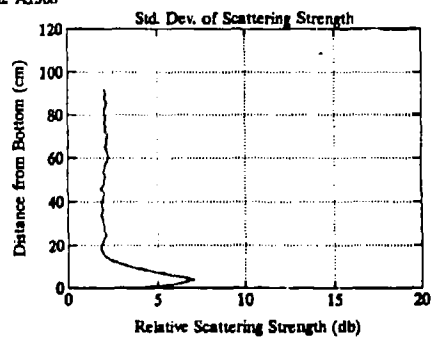
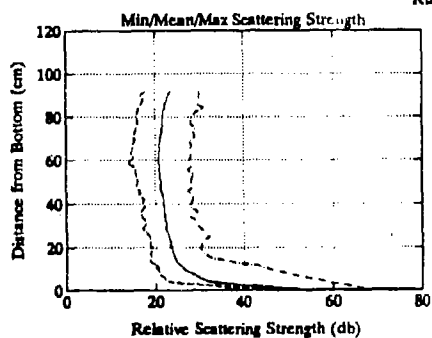
Run: A1507

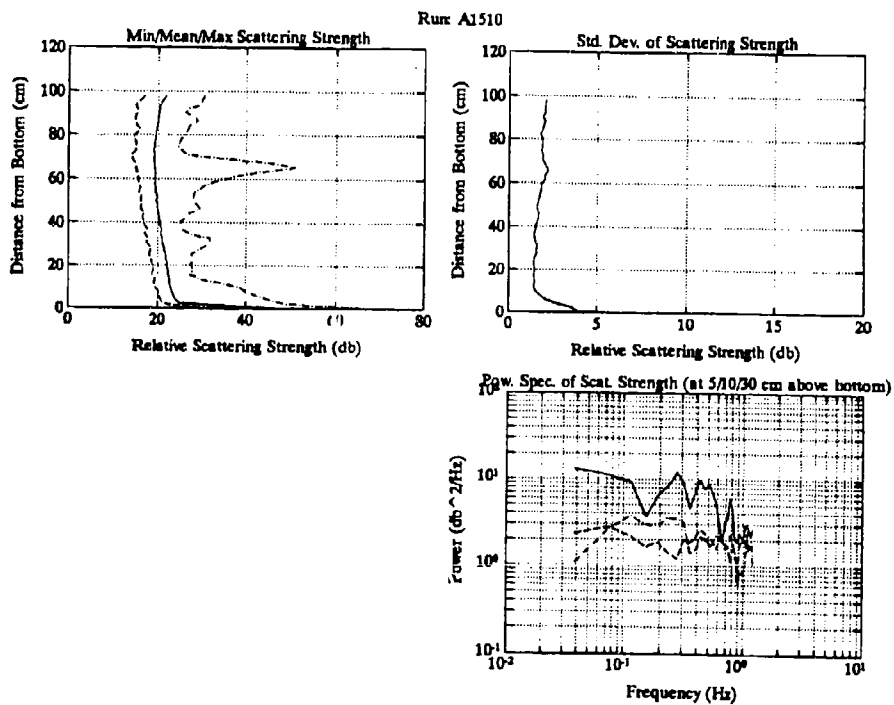
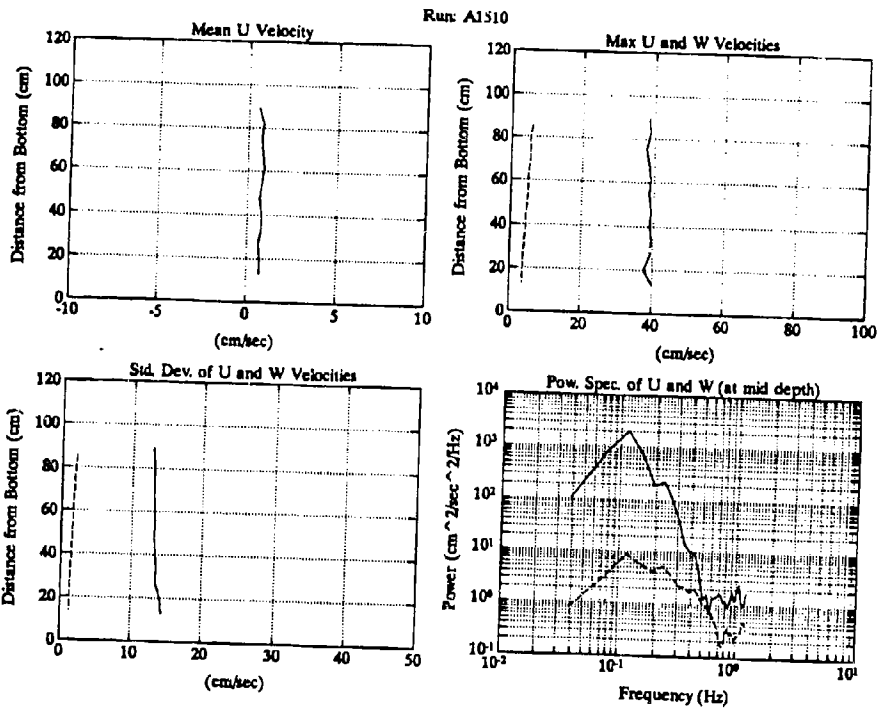


Run: A1508

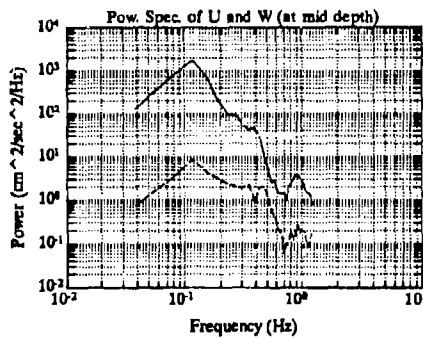
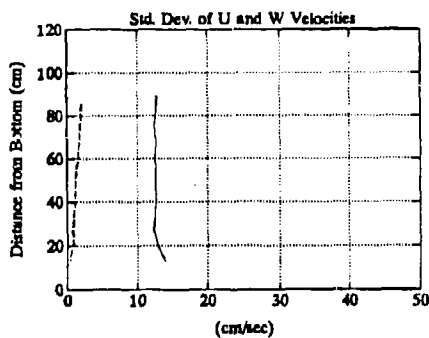
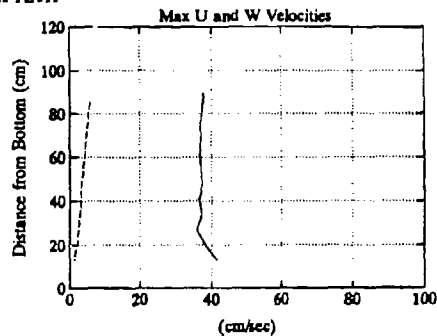
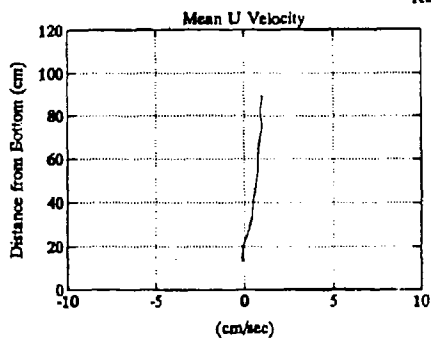


Run: A1508

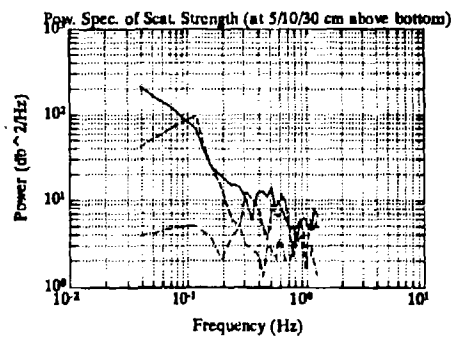
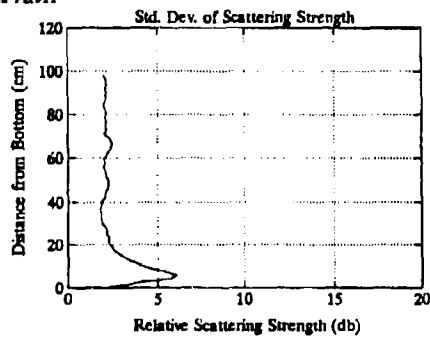
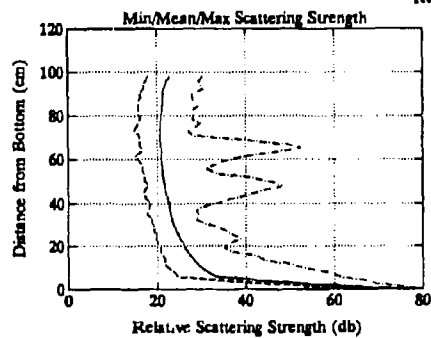




Run: A1511

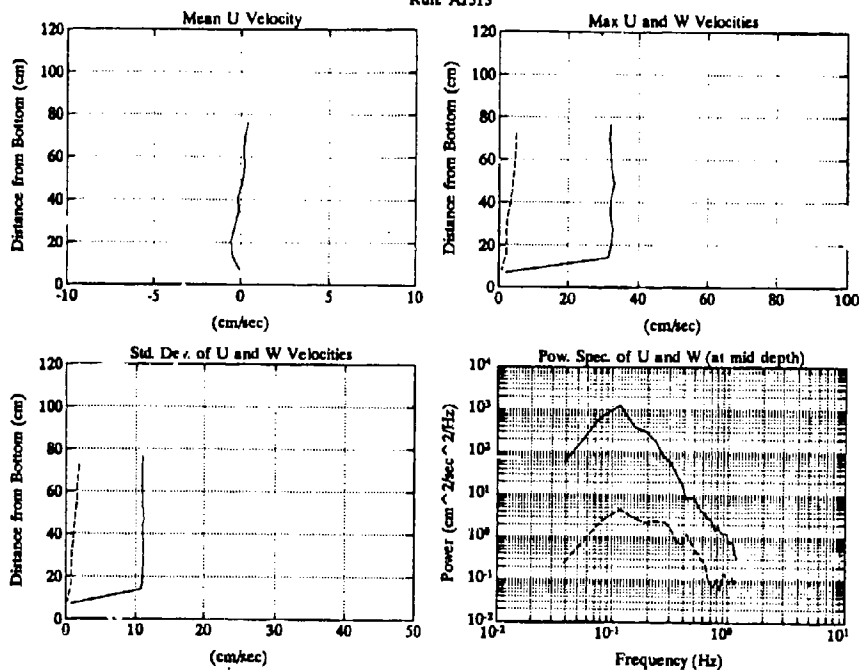


Run: A1511

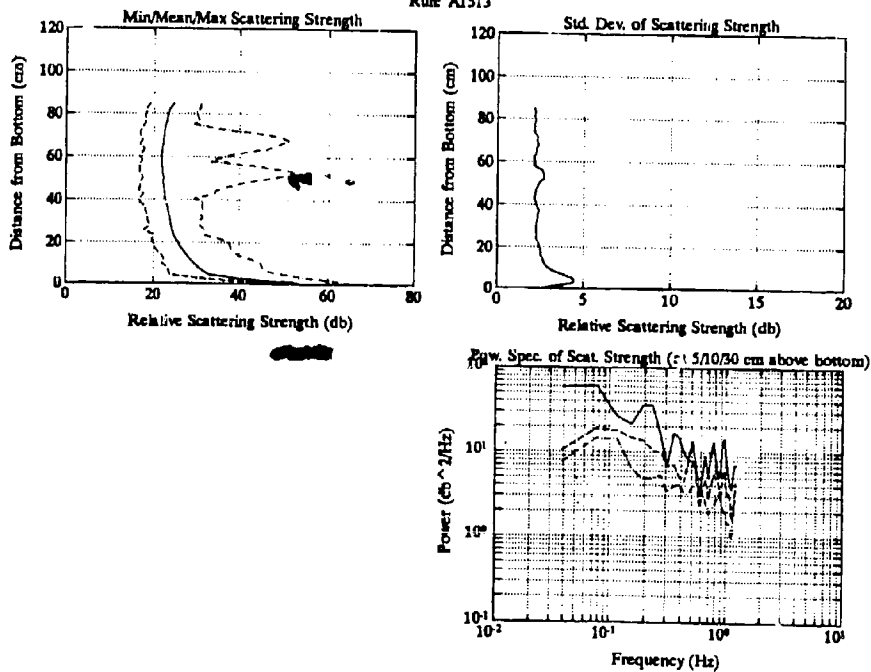


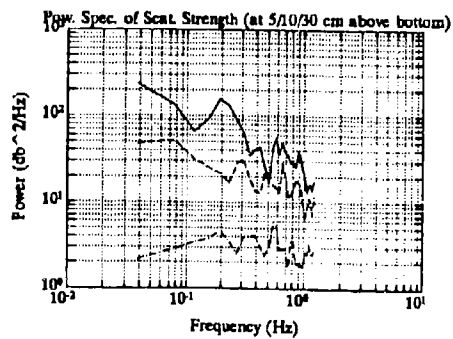
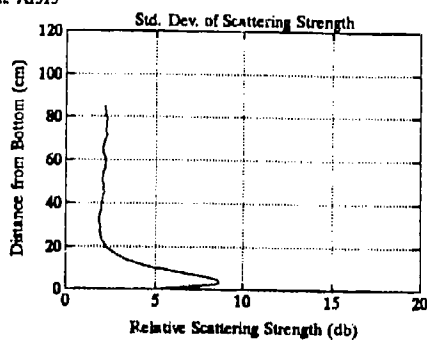
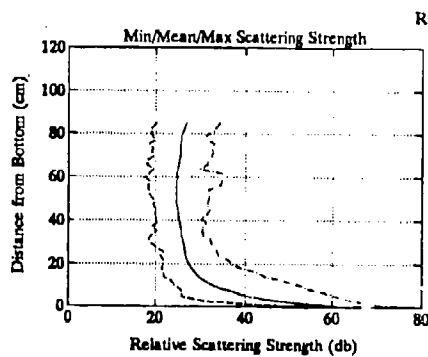
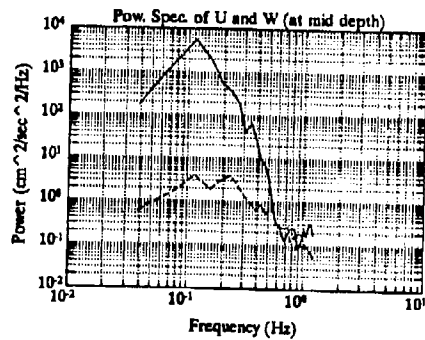
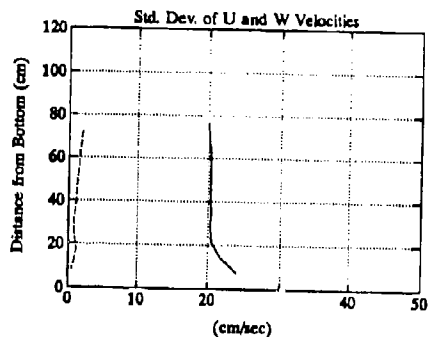
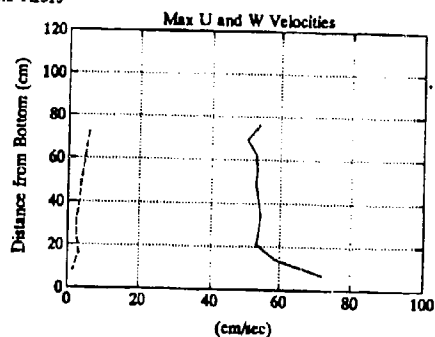
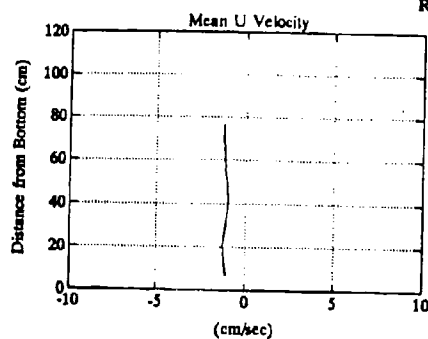


Run: A1513

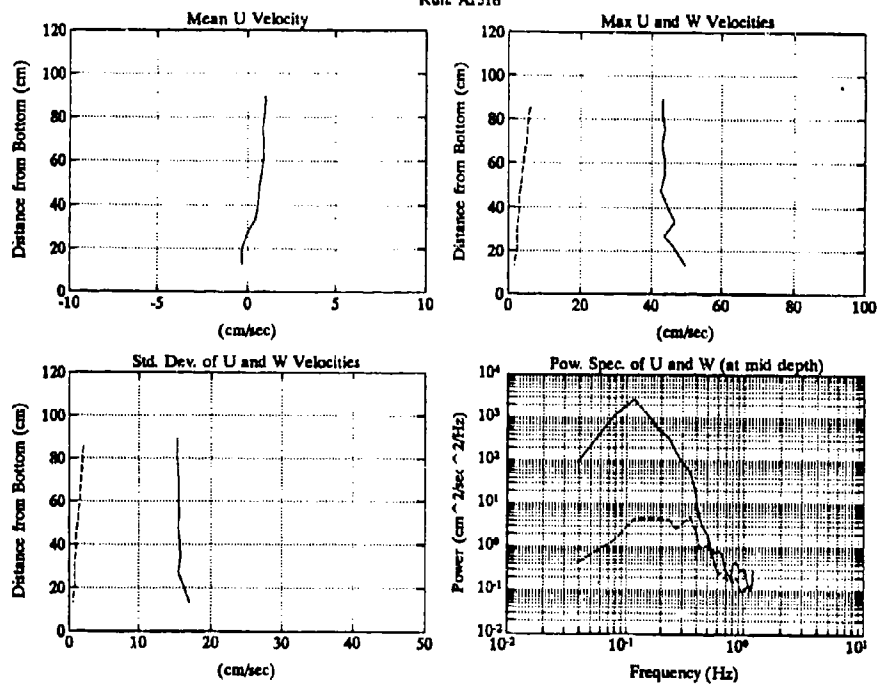


Run: A1513

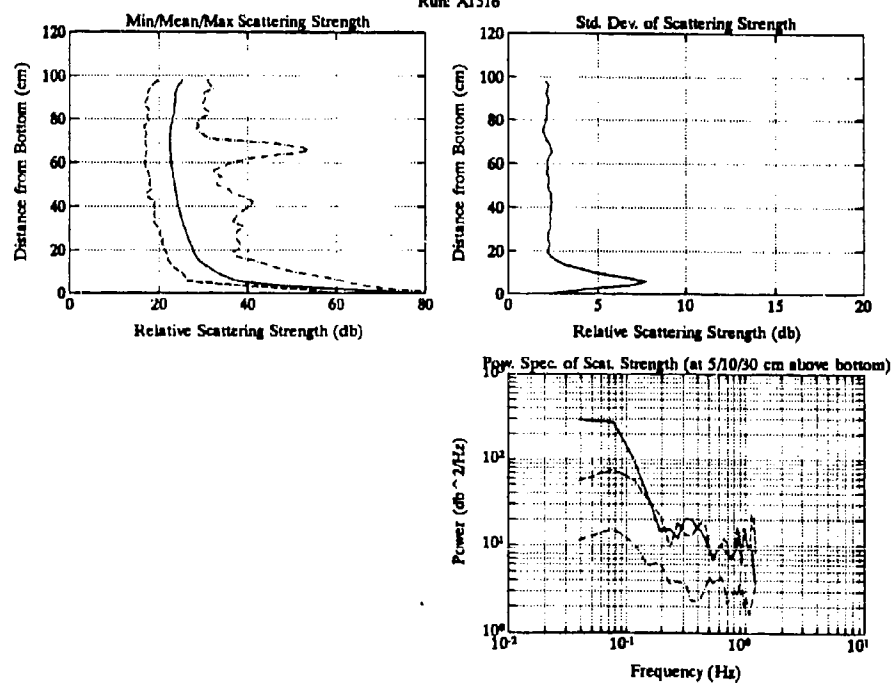




Run: A1516



Run: A1516



# **Appendix I**

## **Offshore ARMS Data - Boundary Layer, Entrainment, and Resuspension**

*by Keith W. Bedford, Sean O'Neil,  
Robert Van Evra III and Jongkook Lee*

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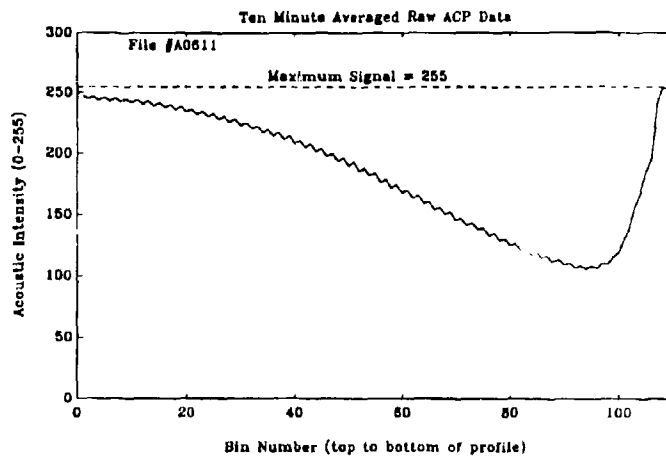


Figure 11. Averaged profile of the raw ACP signal

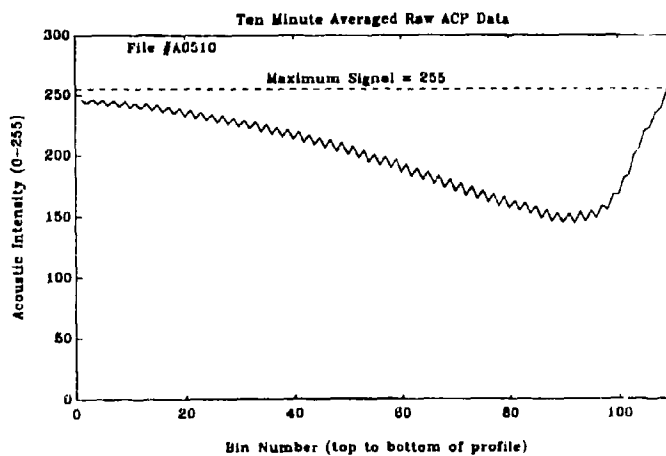


Figure 12. Averaged profile of the raw ACP signal

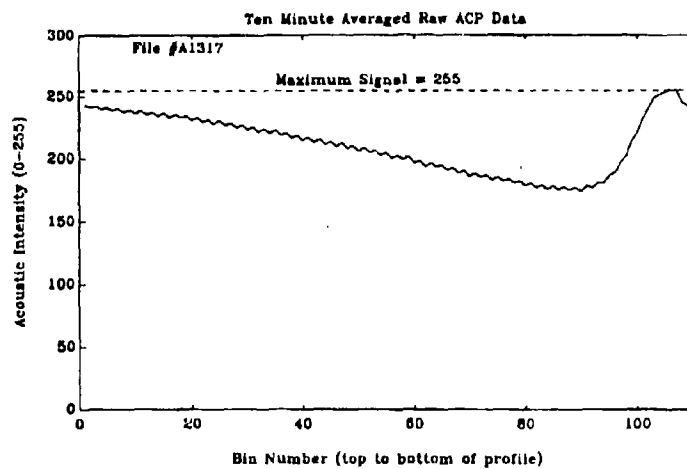


Figure 13. Averaged profile of the raw ACP signal

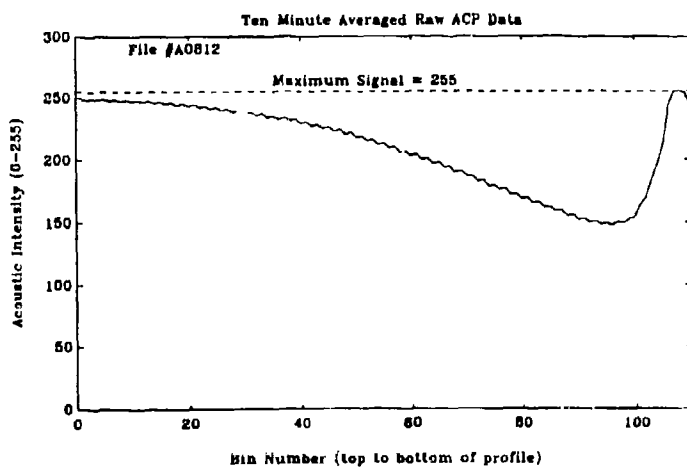


Figure 14. Averaged profile of the raw ACP signal

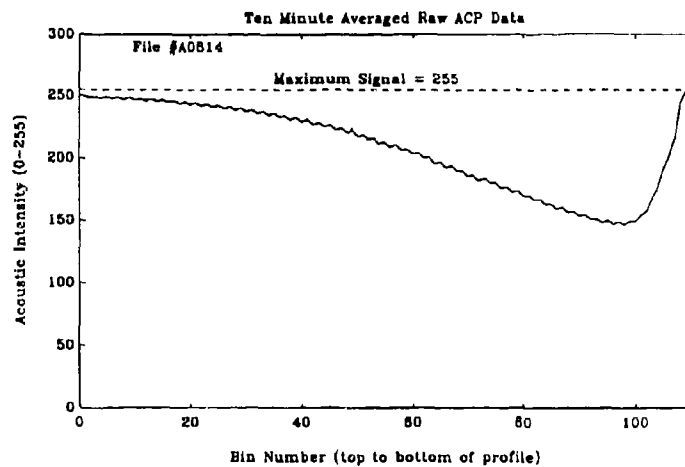


Figure 15. Averaged profile of the raw ACP signal

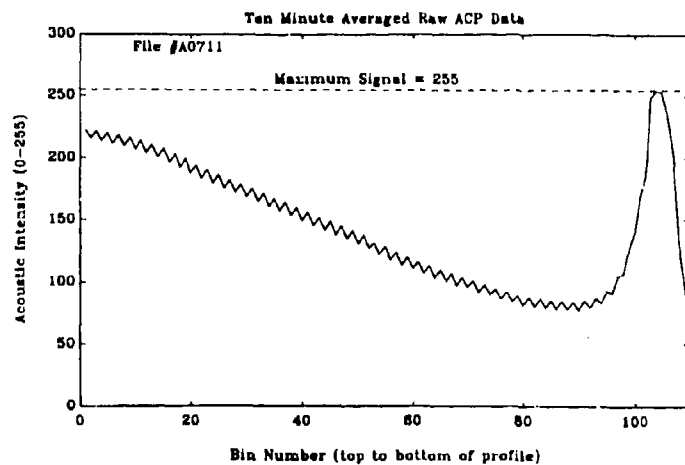


Figure 16. Averaged profile of the raw ACP signal

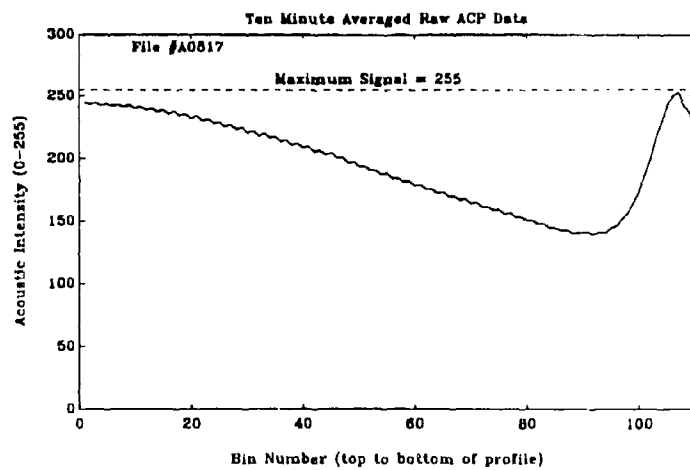


Figure 17. Averaged profile of the raw ACP signal

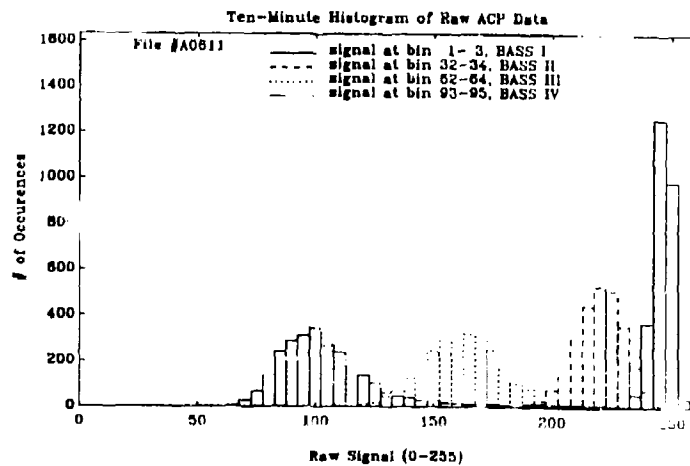


Figure 18. Histogram of the raw ACP signals at four BASS locations



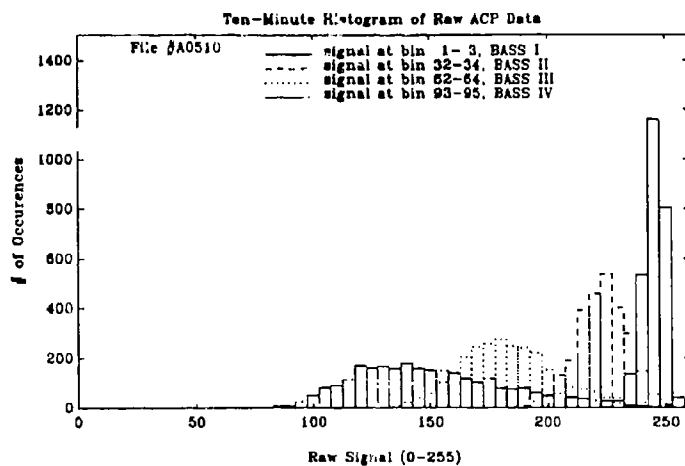


Figure I9. Histogram of the raw ACP signals at four BASS locations

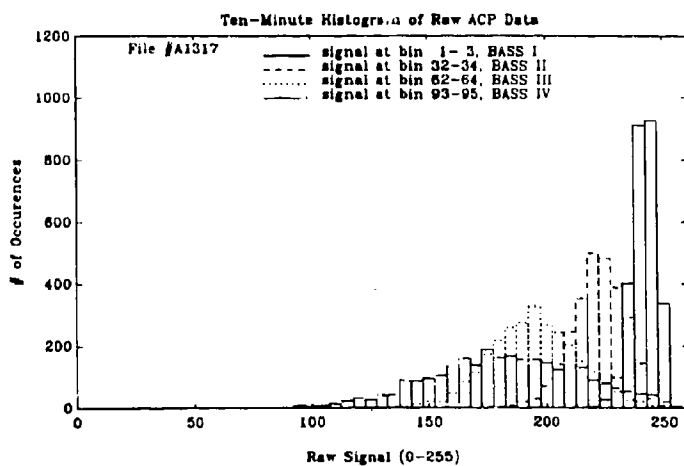


Figure I10. Averaged profile of the raw ACP signal

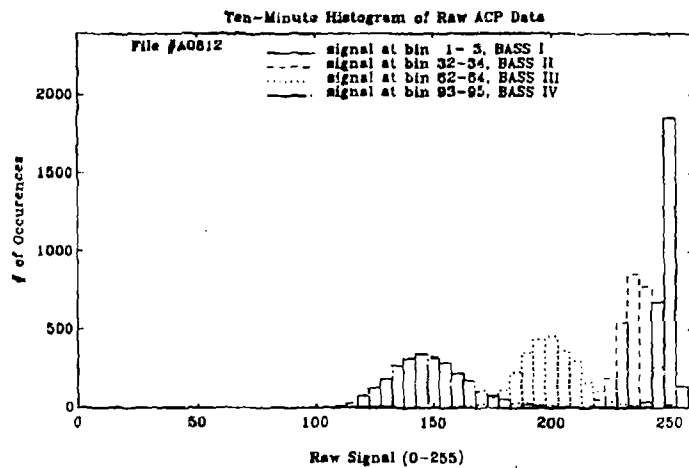


Figure I11. Histogram of the raw ACP signals at four BASS locations

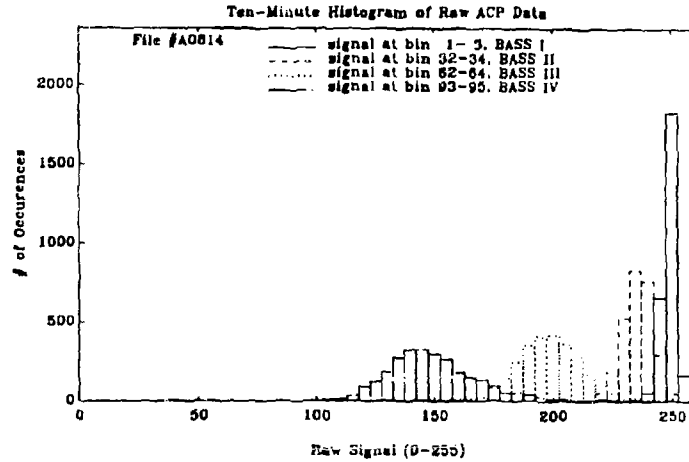


Figure I12. Histogram of the raw ACP signals at four BASS locations

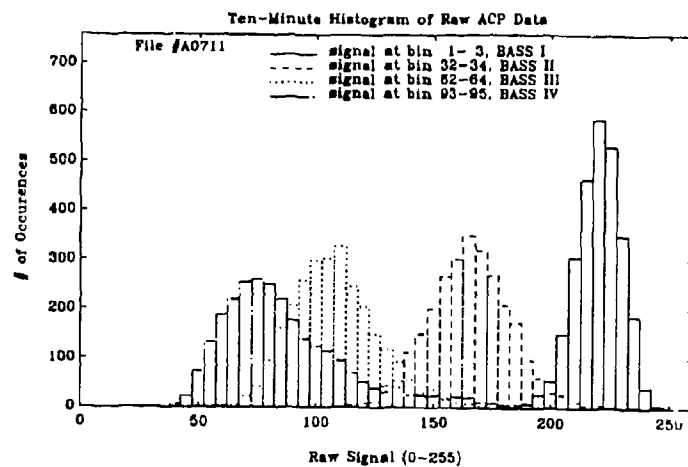


Figure I13. Histogram of the raw ACP signals at four BASS locations

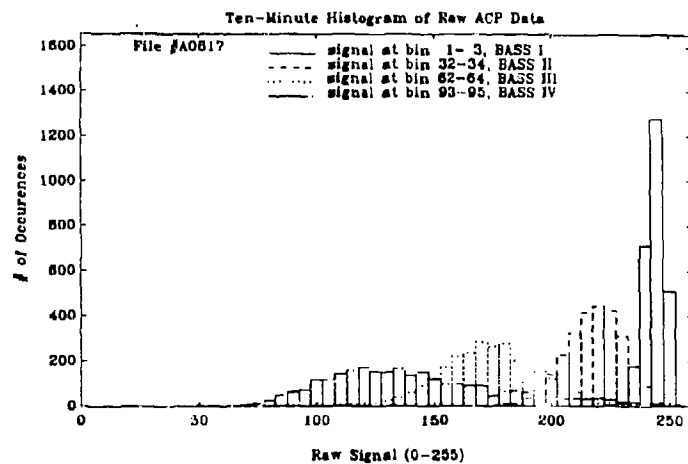


Figure I14. Histogram of the raw ACP signals at four BASS locations

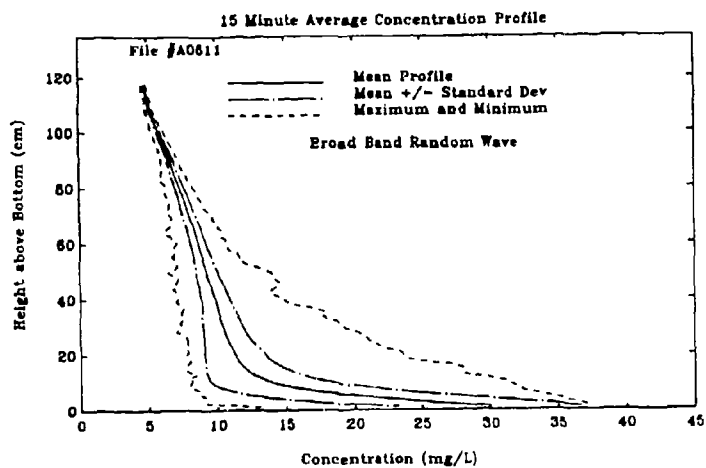


Figure 115. Interpreted concentration profile

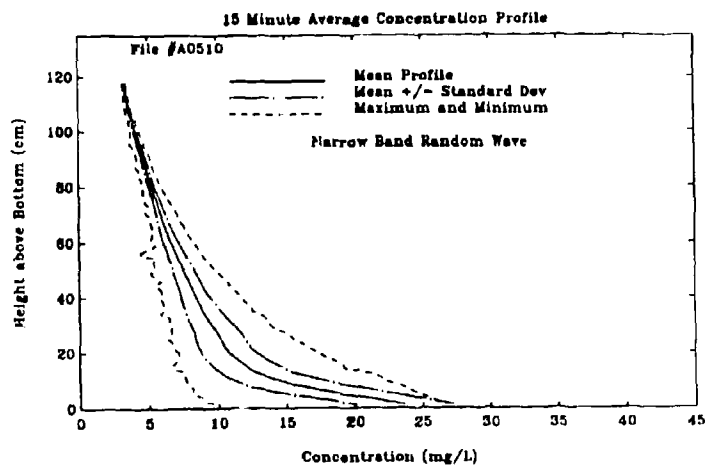


Figure 116. Interpreted concentration profile

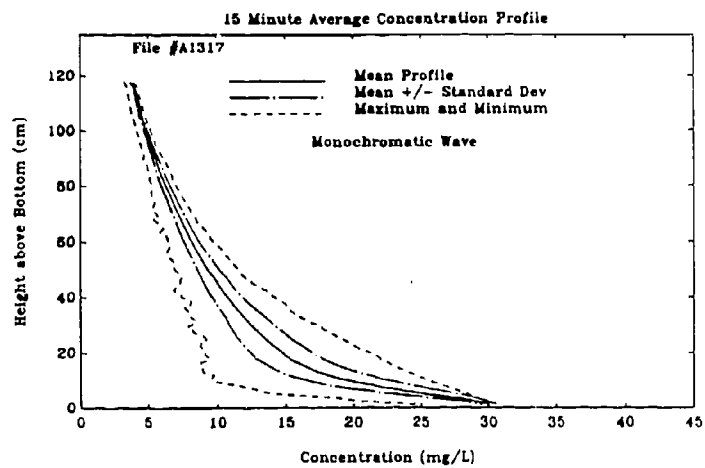


Figure 117. Interpreted concentration profile

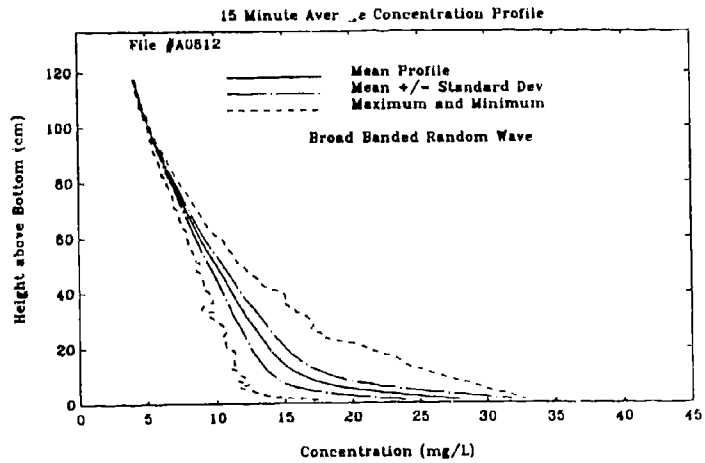


Figure 118. Interpreted concentration profile

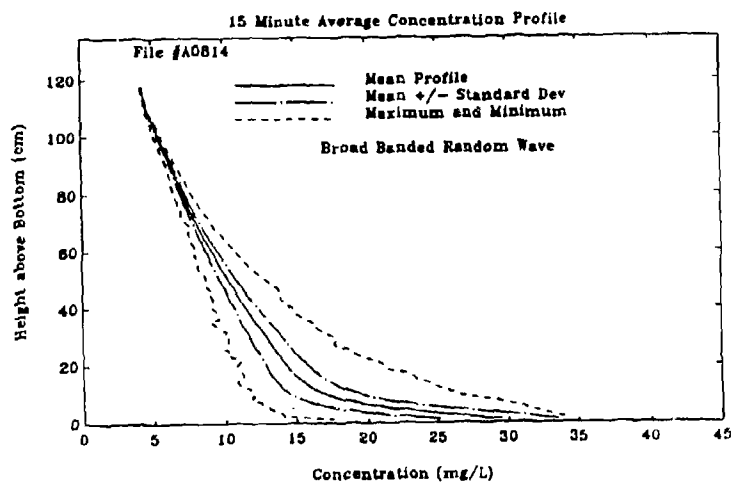


Figure 119. Interpreted concentration profile

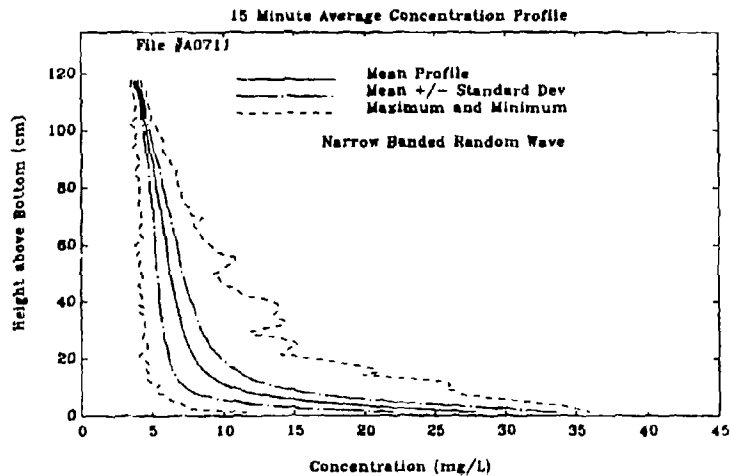


Figure 120. Interpreted concentration profile

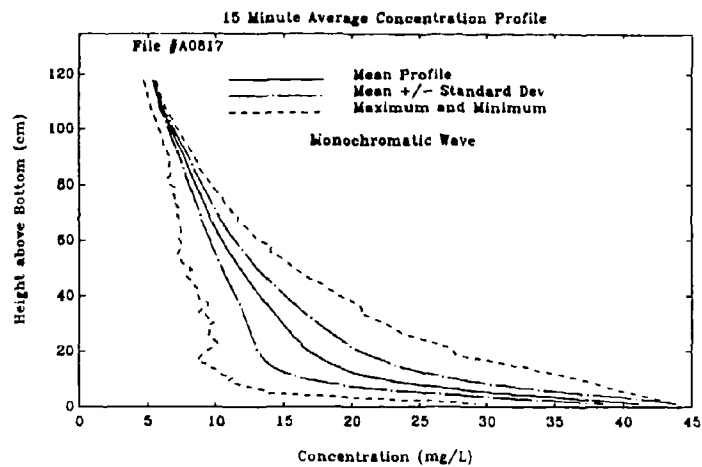


Figure I21. Interpreted concentration profile

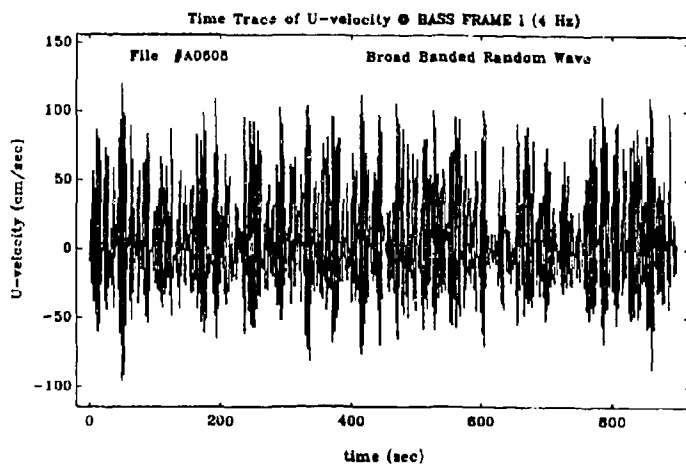


Figure I22. Time trace of interpreted velocity data

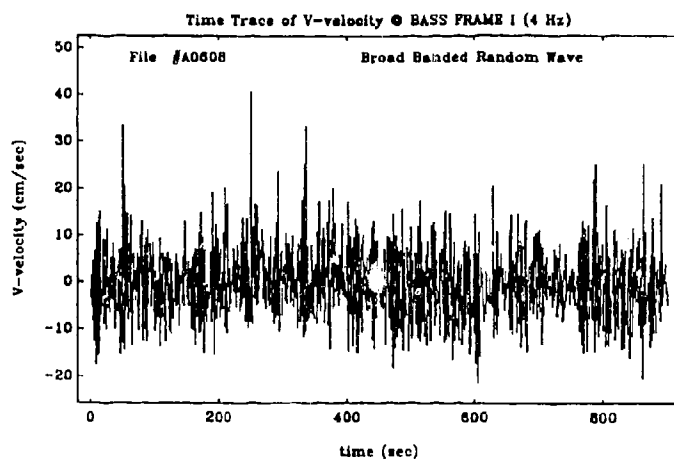


Figure 123. Time trace of interpreted velocity data

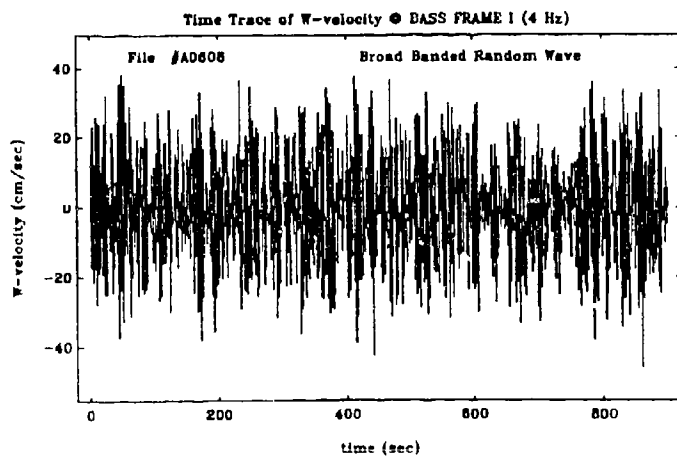


Figure 124. Time trace of interpreted velocity data



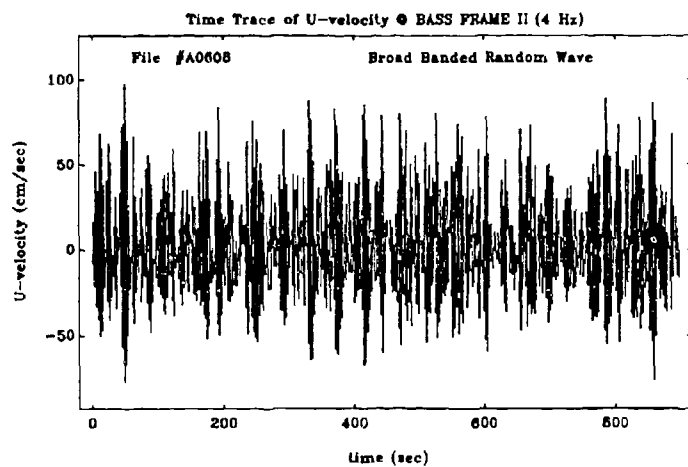


Figure 125. Time trace of interpreted velocity data

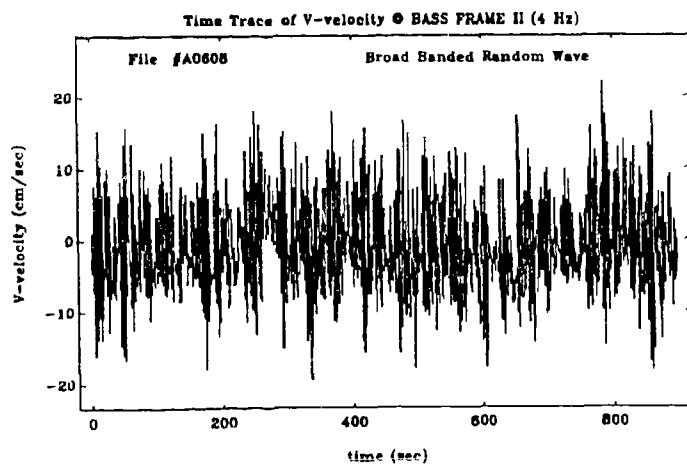


Figure 126. Time trace of interpreted velocity data

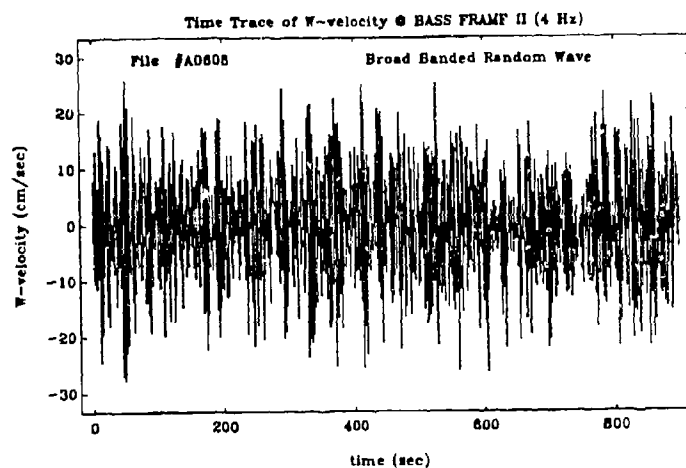


Figure I27. Time trace of interpreted velocity data

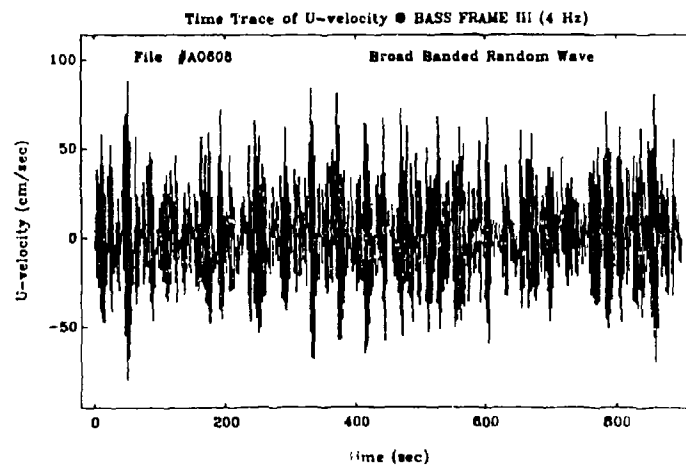


Figure I28. Time trace of interpreted velocity data

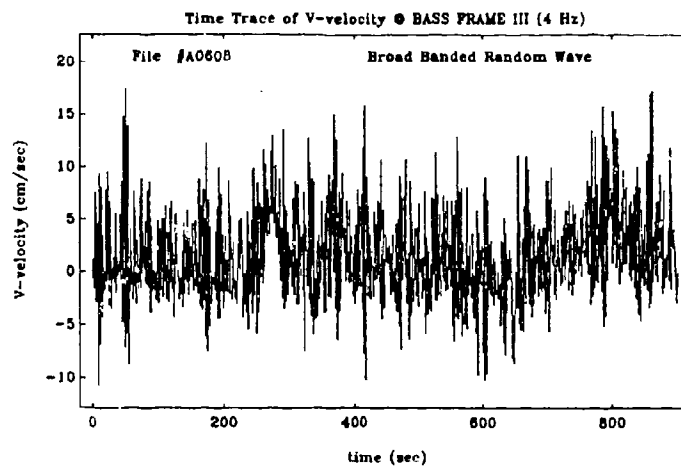


Figure 129. Time trace of interpreted velocity data

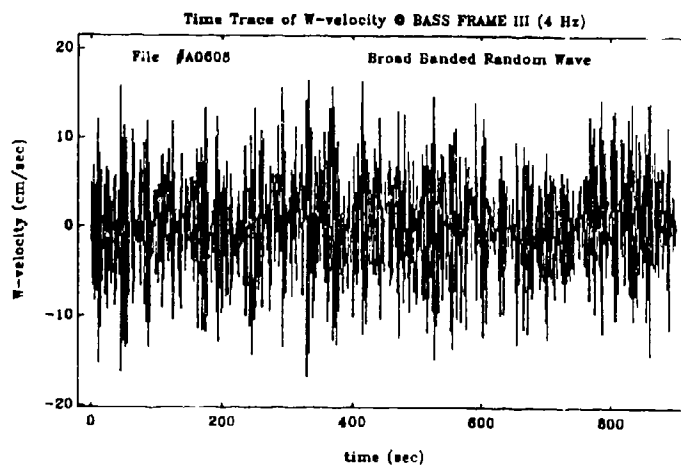


Figure 130. Time trace of interpreted velocity data

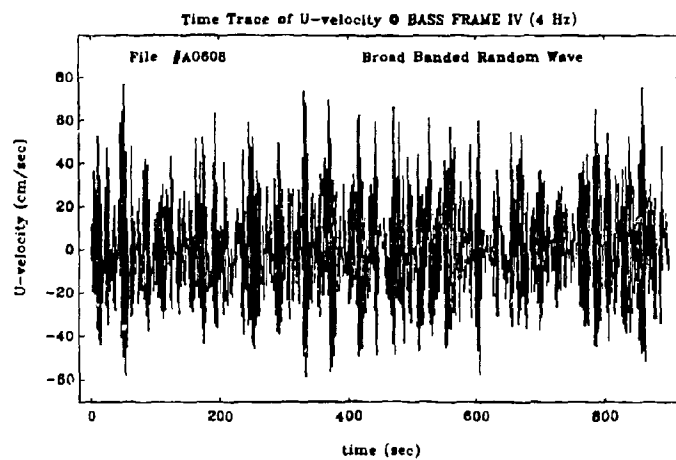


Figure 131. Time trace of interpreted velocity data

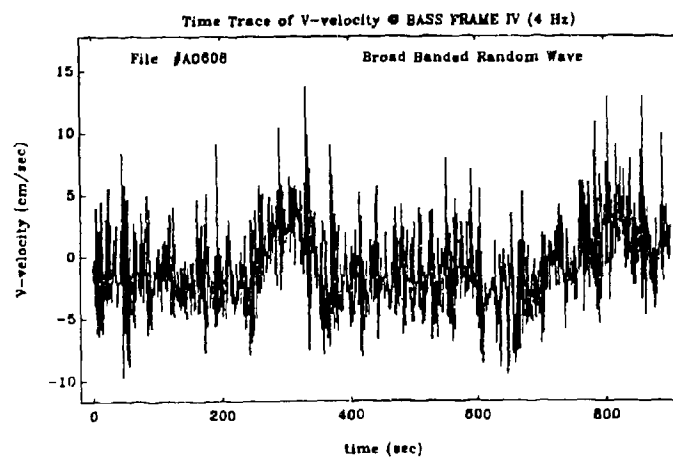


Figure 132. Time trace of interpreted velocity data

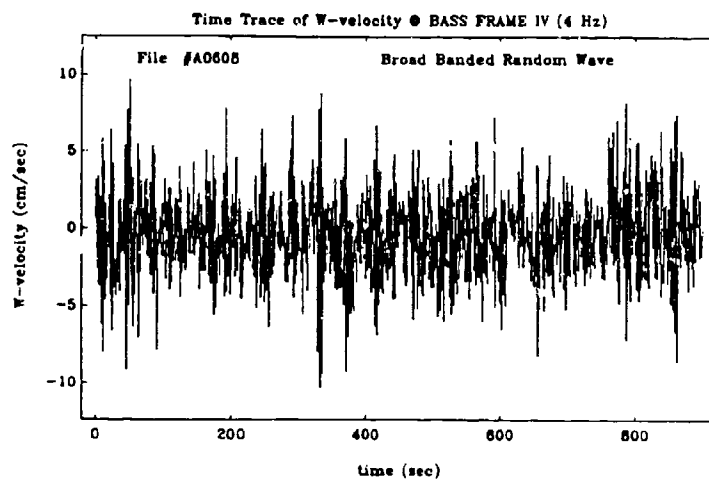


Figure 133. Time trace of interpreted velocity data

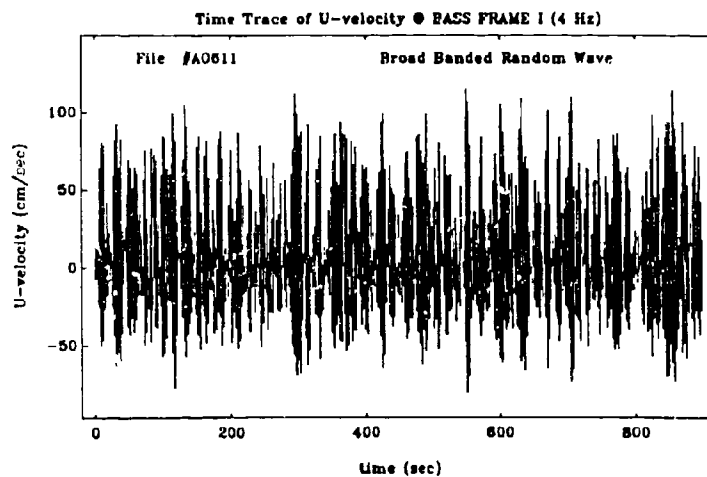


Figure 134. Time trace of interpreted velocity data

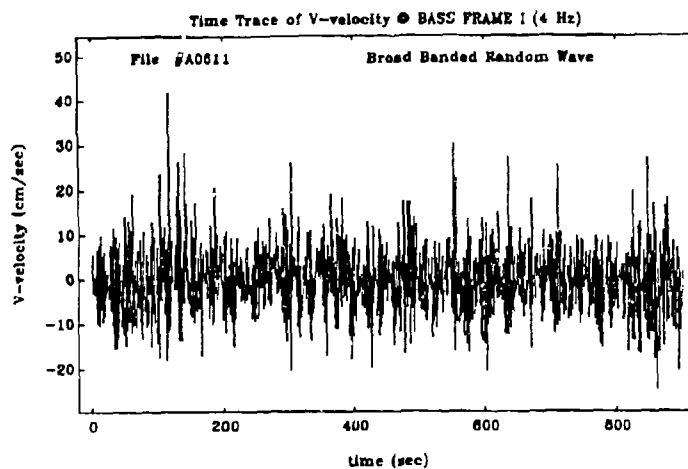


Figure I35. Time trace of interpreted velocity data

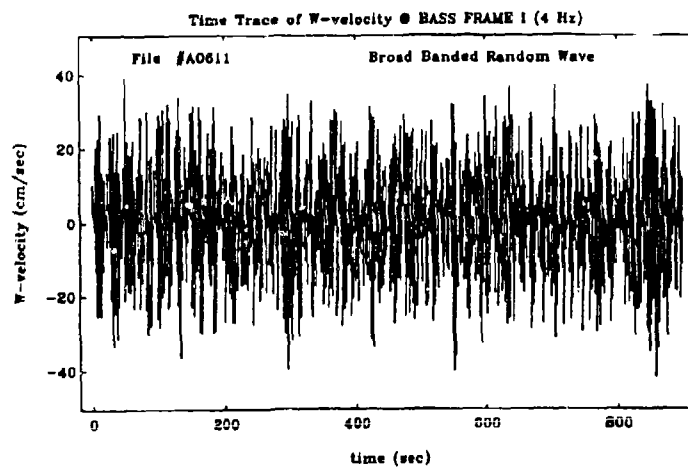


Figure I36. Time trace of interpreted velocity data

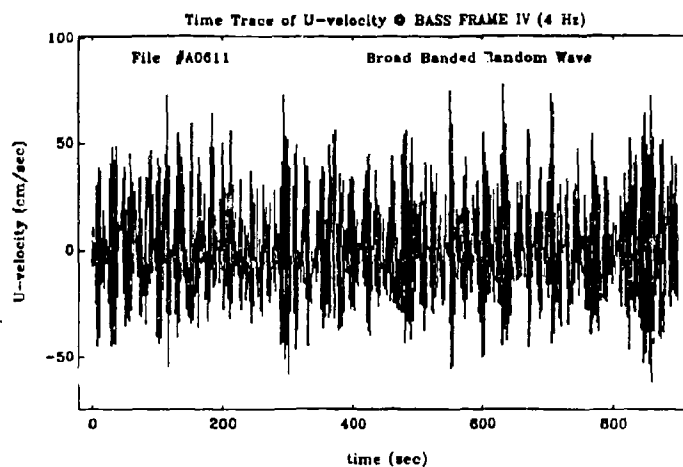


Figure 137. Time trace of interpreted velocity data

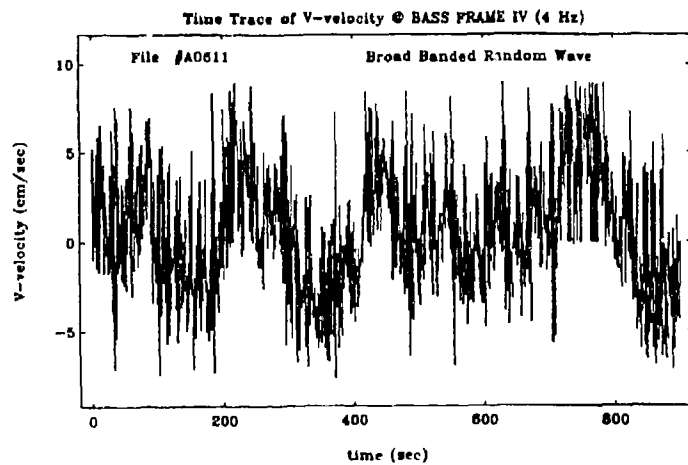


Figure 138. Time trace of interpreted velocity data

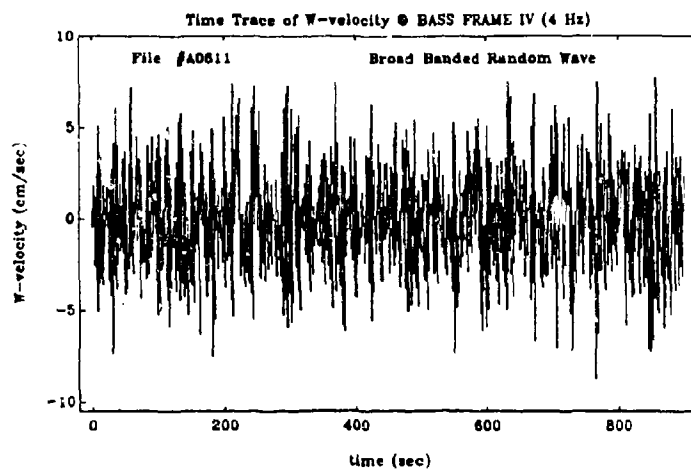


Figure 139. Time trace of interpreted velocity data

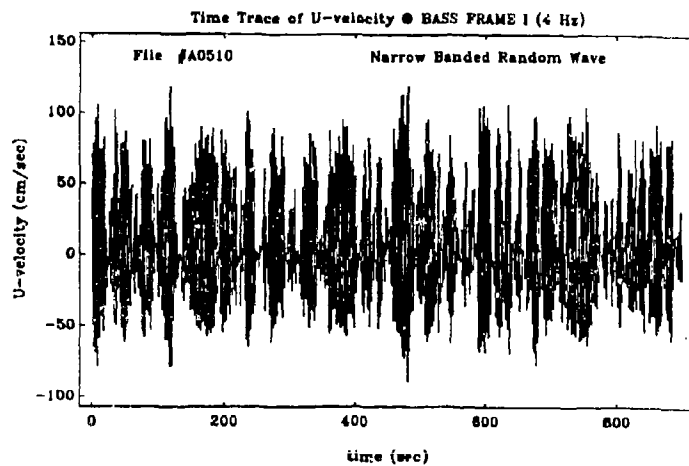


Figure 140. Time trace of interpreted velocity data



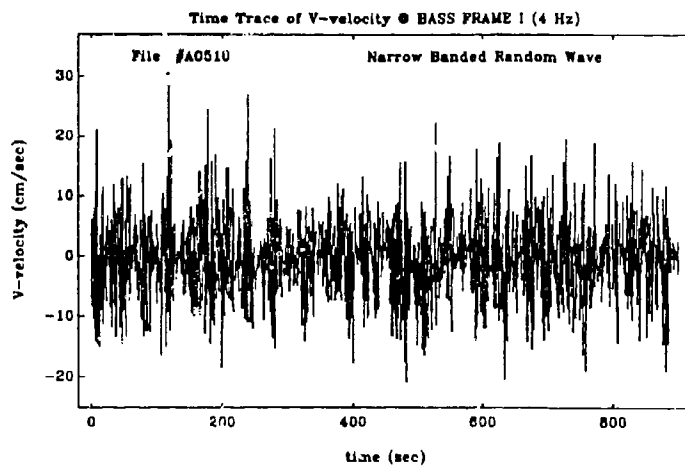


Figure 141. Time trace of interpreted velocity data

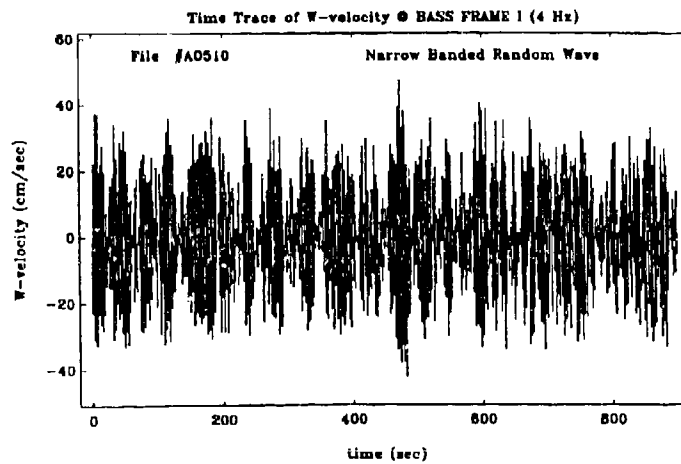


Figure 142. Time trace of interpreted velocity data

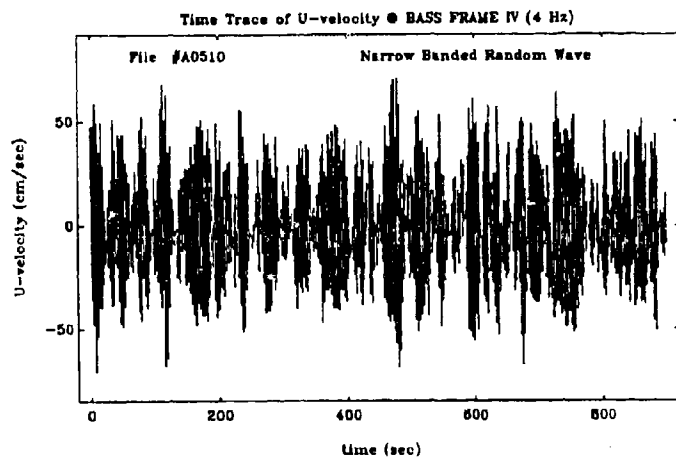


Figure 143. Time trace of interpreted velocity data

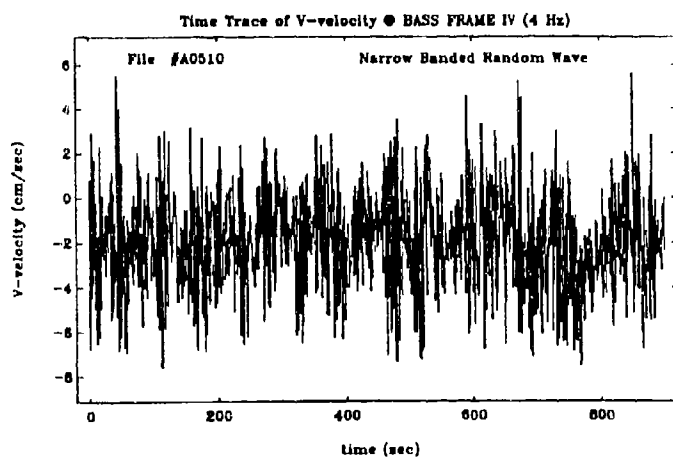


Figure 144. Time trace of interpreted velocity data

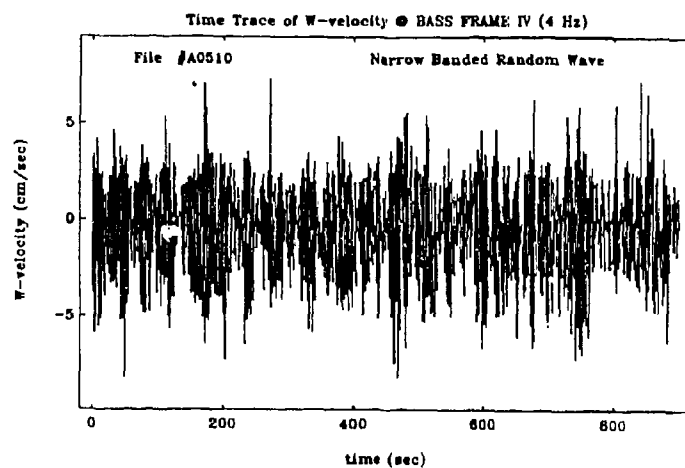


Figure 145. Time trace of interpreted velocity data

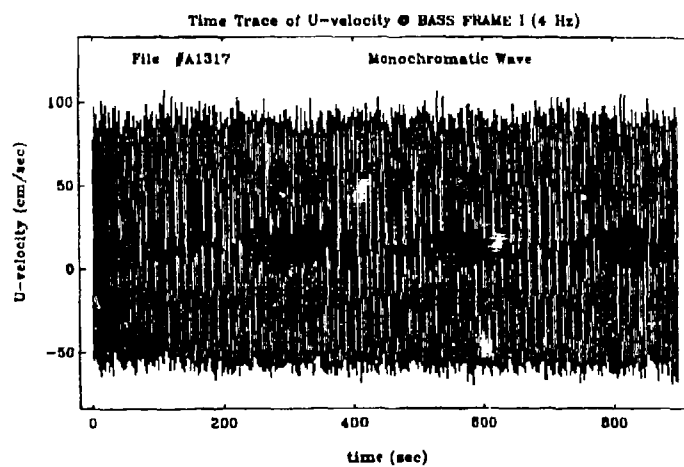


Figure 146. Time trace of interpreted velocity data

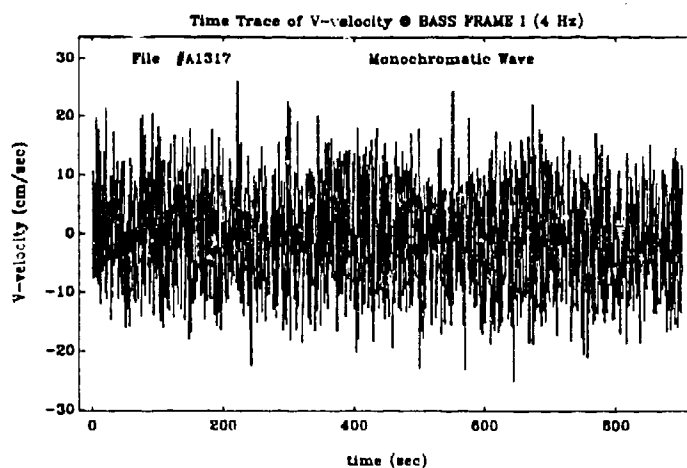


Figure 147. Time trace of interpreted velocity data

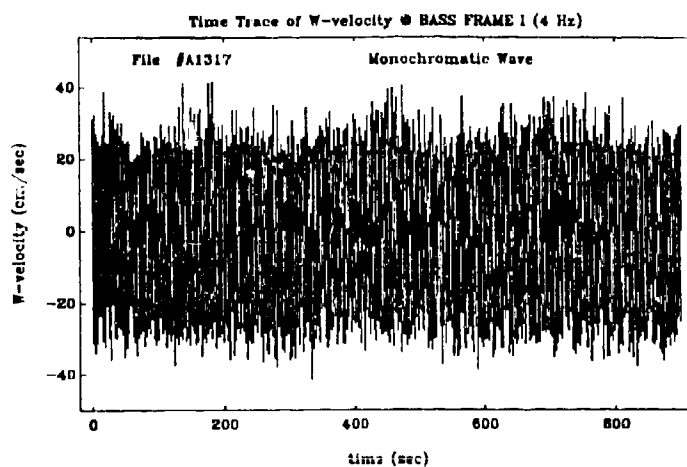


Figure 148. Time trace of interpreted velocity data

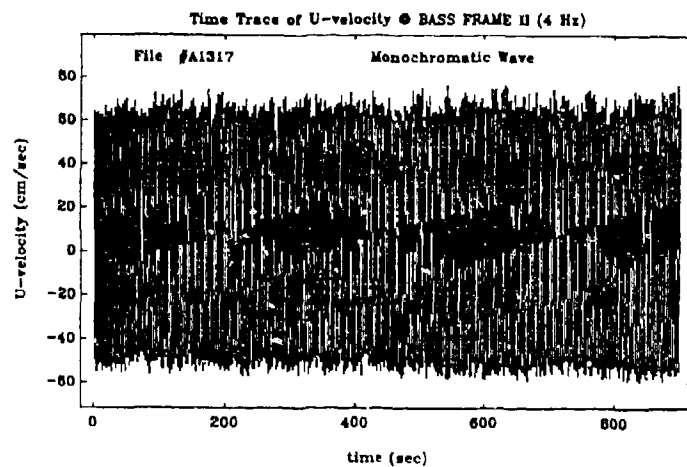


Figure 149. Time trace of interpreted velocity data

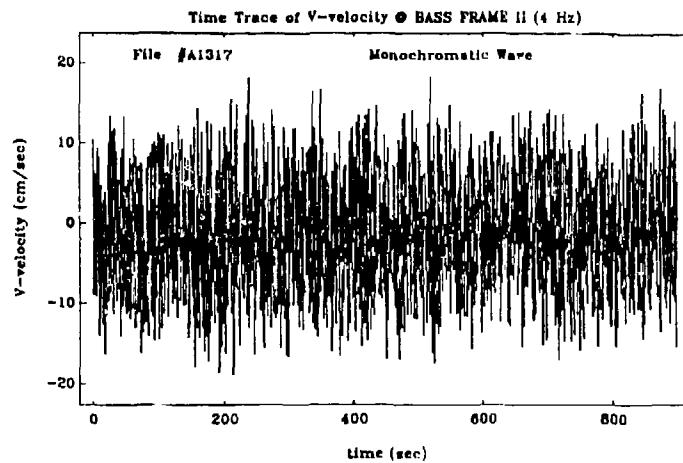


Figure 150. Time trace of interpreted velocity data

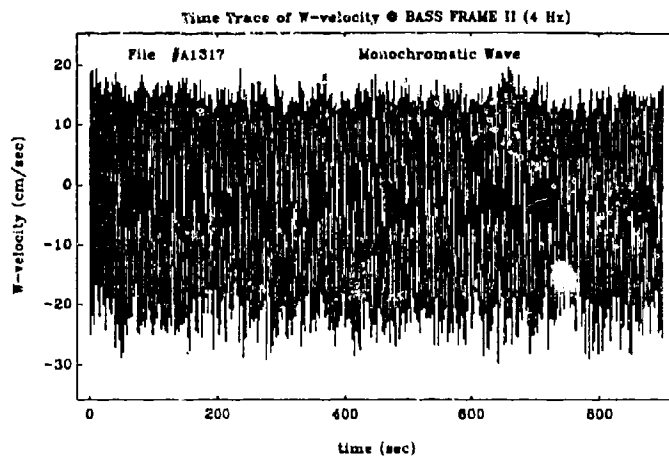


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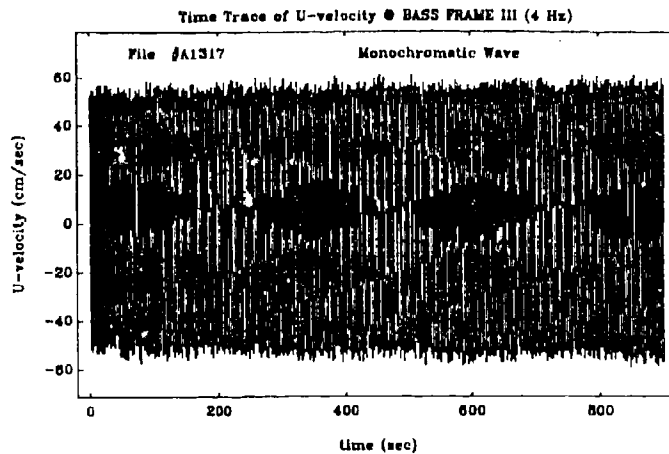


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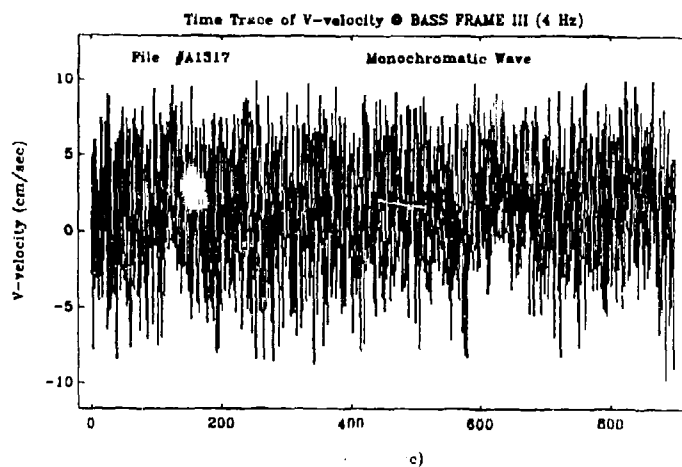


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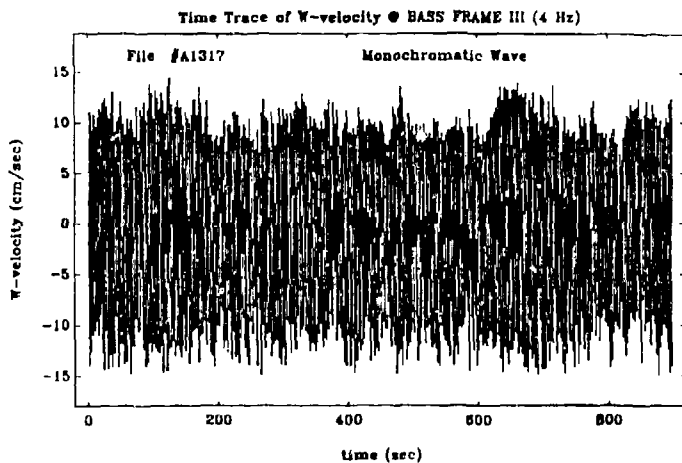


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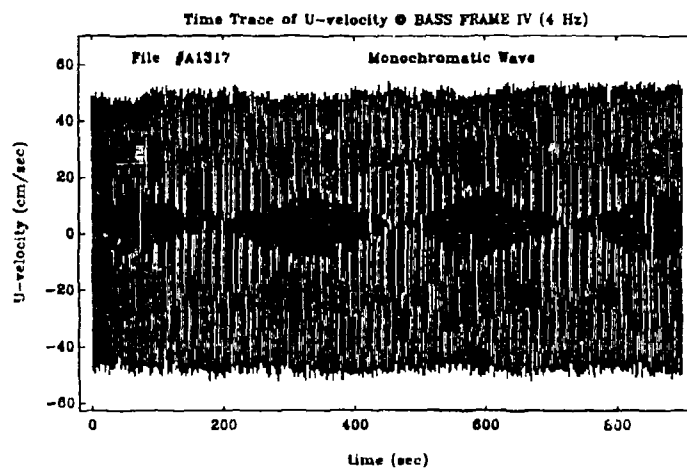


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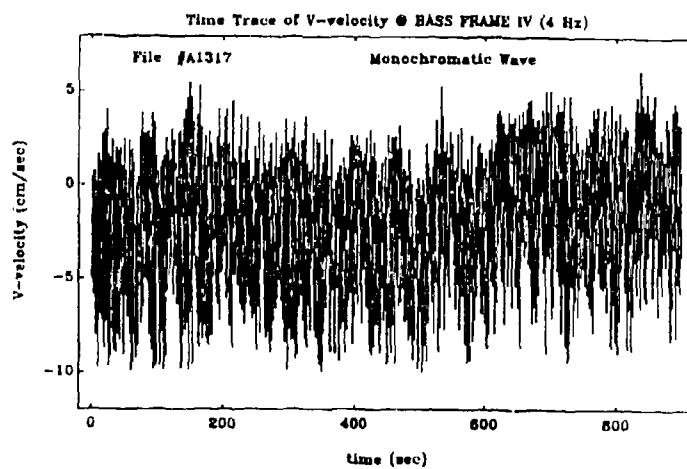


Figure 156. Time trace of interpreted velocity data



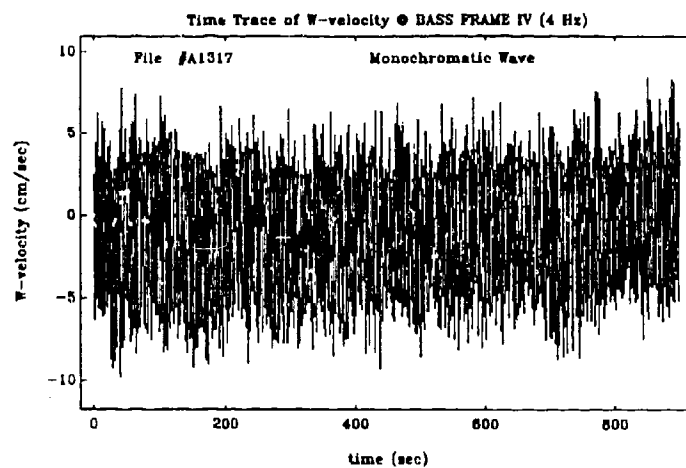


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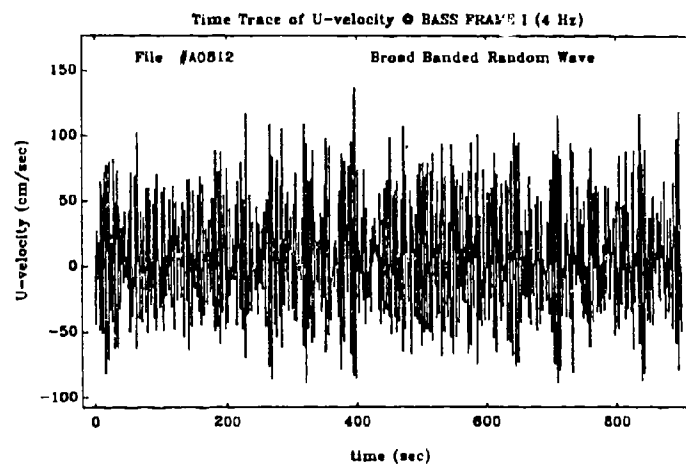


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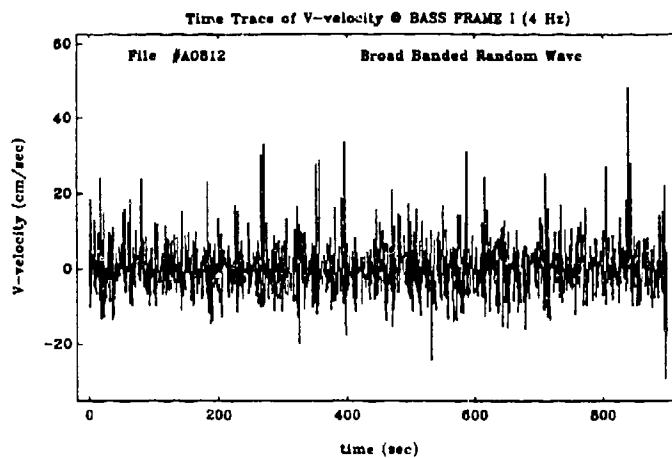


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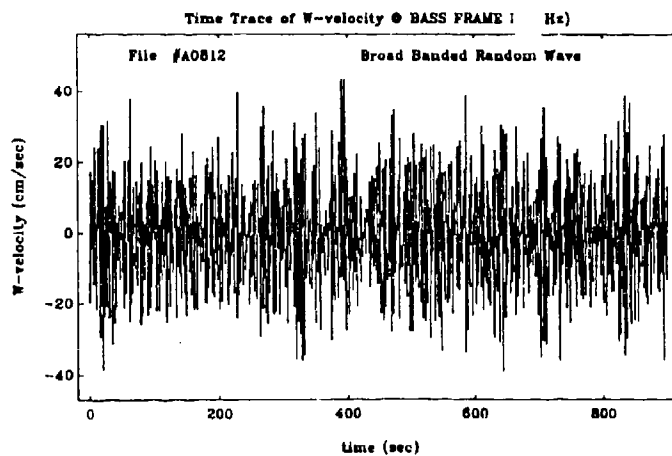


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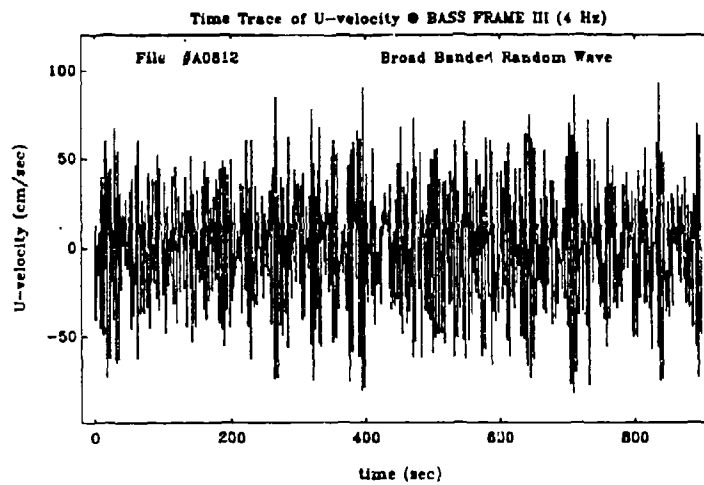


Figure 161. Time trace of interpreted velocity data

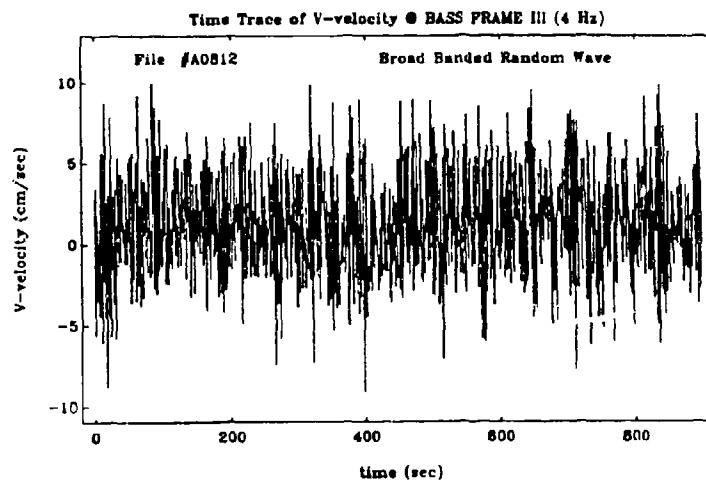


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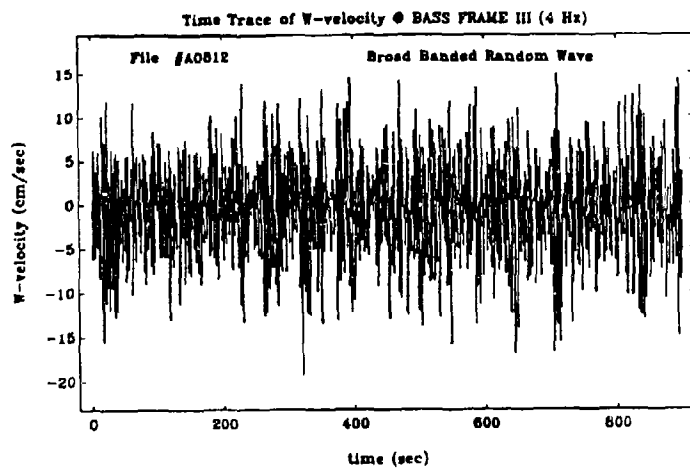


Figure 163. Time trace of interpreted velocity data

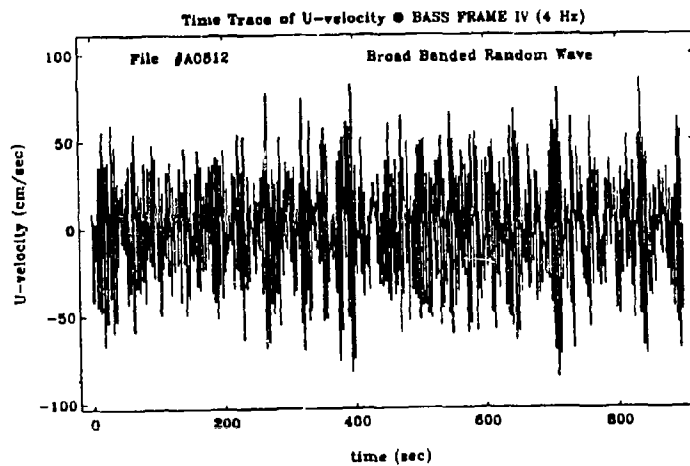


Figure 164. Time trace of interpreted velocity data

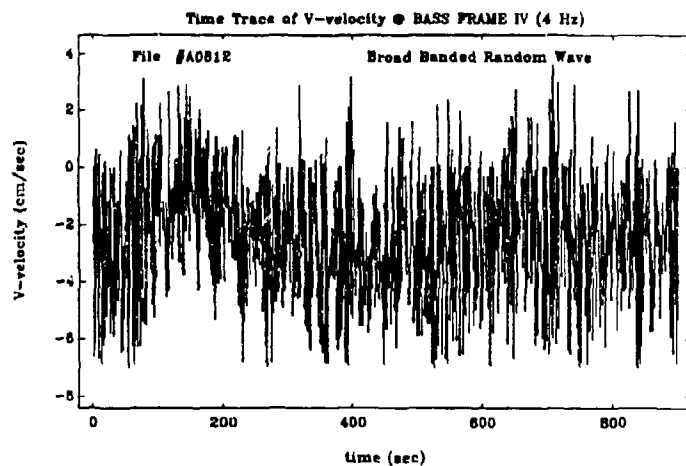


Figure 165. Time trace of interpreted velocity data

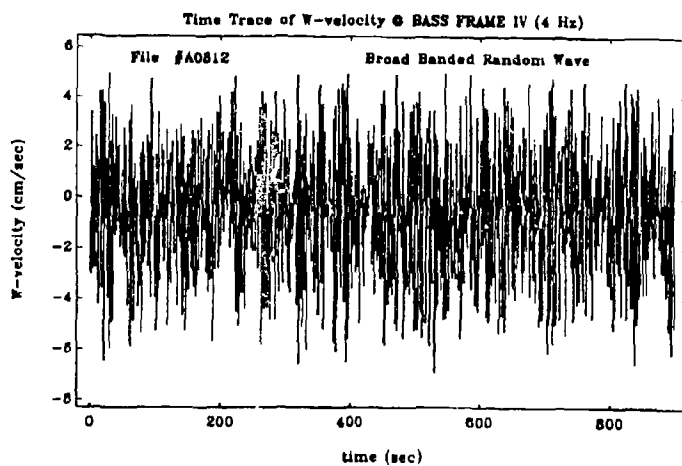


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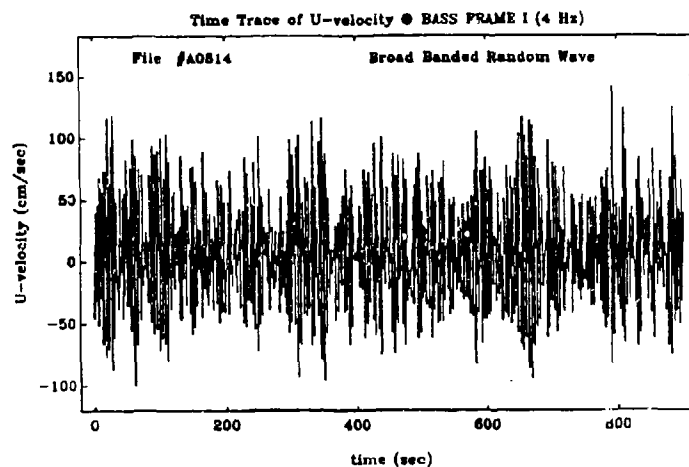


Figure 167. Time trace of interpreted velocity data

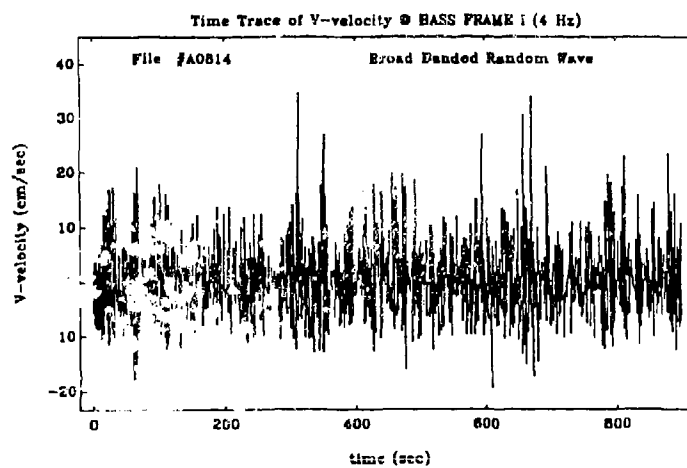


Figure 168. Time trace of interpreted velocity data

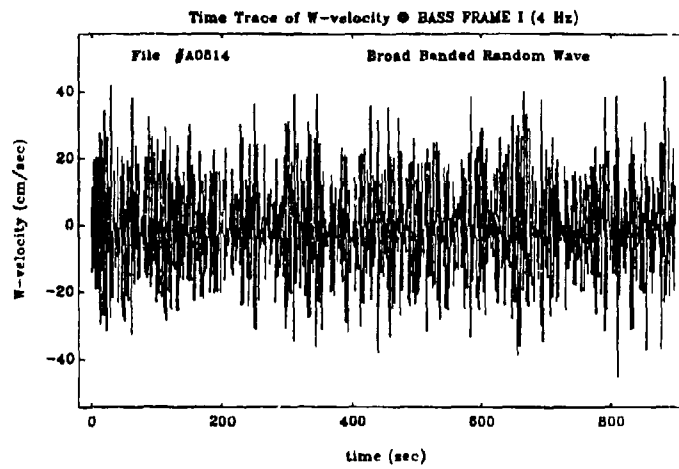


Figure 169. Time trace of interpreted velocity data

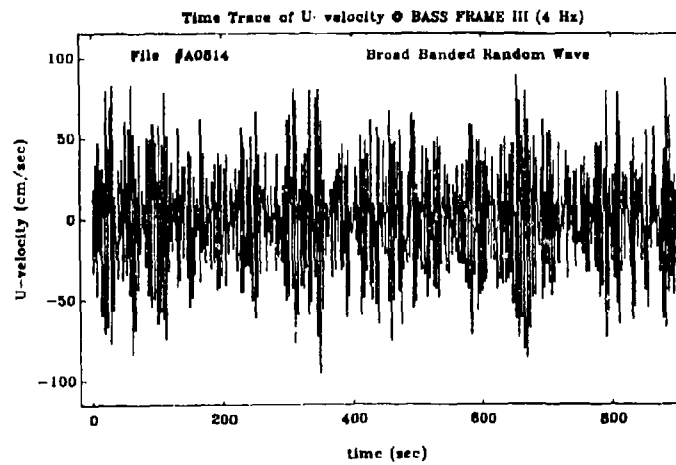


Figure 170. Time trace of interpreted velocity data

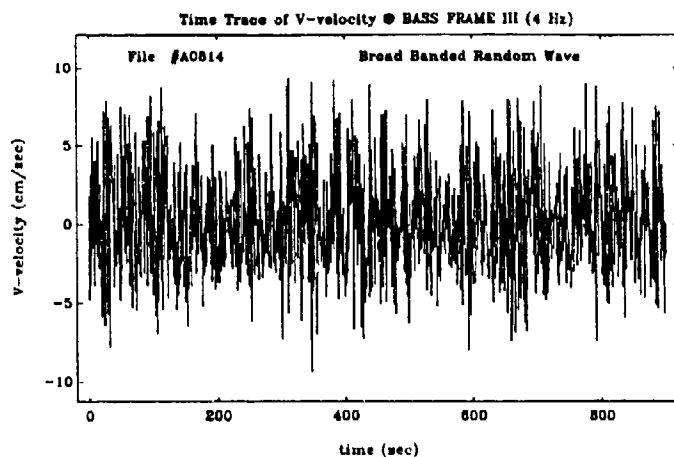


Figure 171. Time trace of interpreted velocity data

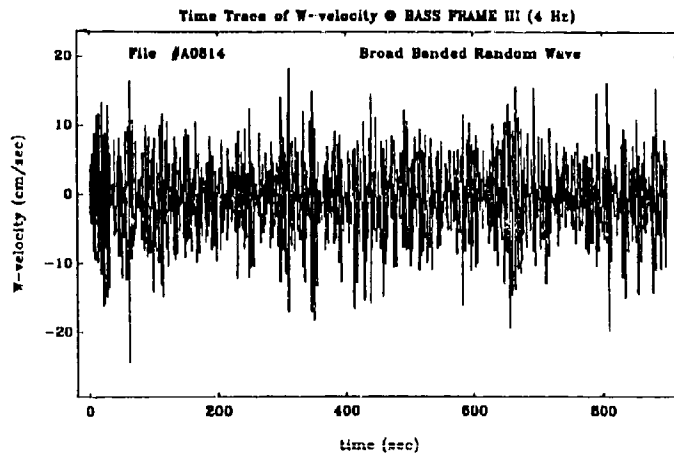


Figure 172. Time trace of interpreted velocity data



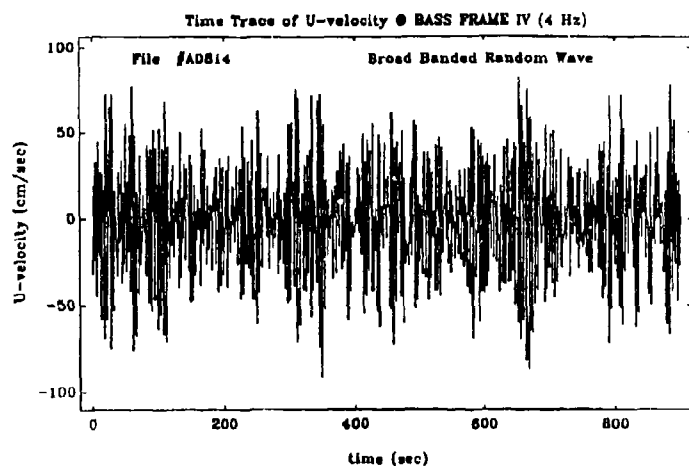


Figure 173. Time trace of interpreted velocity data

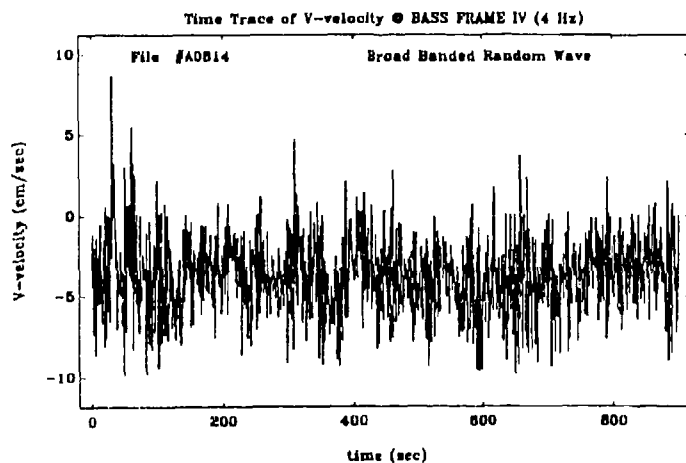


Figure 174. Time trace of interpreted velocity data

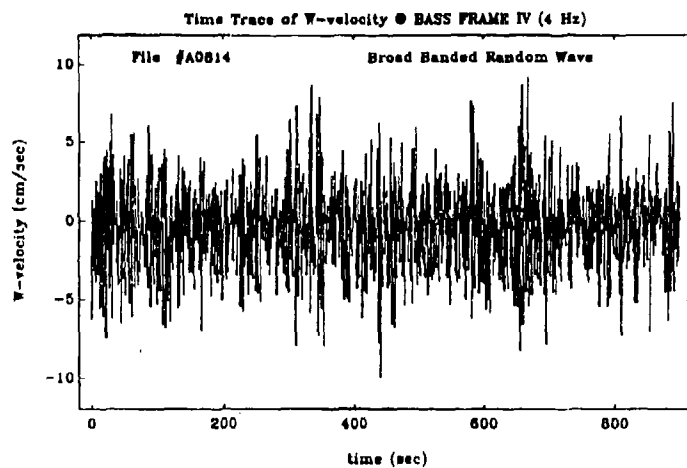


Figure 175. Time trace of interpreted velocity data

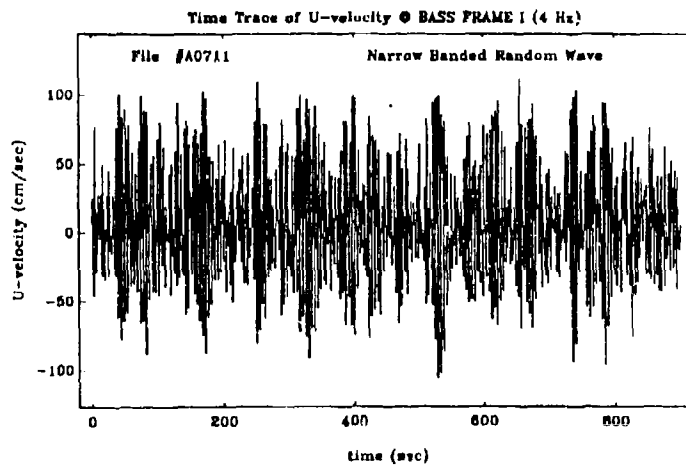


Figure 176. Time trace of interpreted velocity data

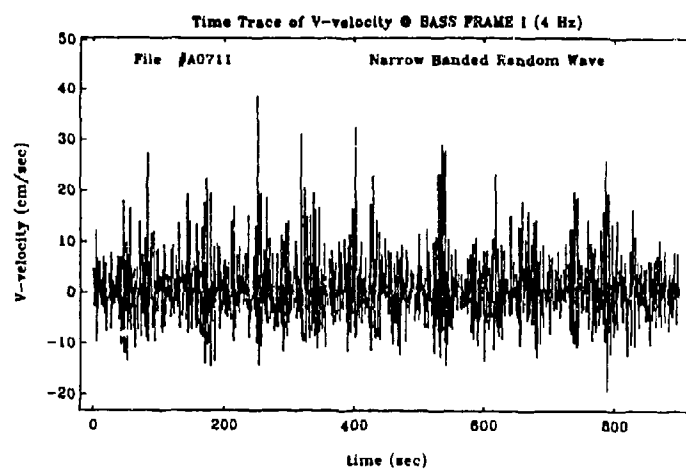


Figure 177. Time trace of interpreted velocity data

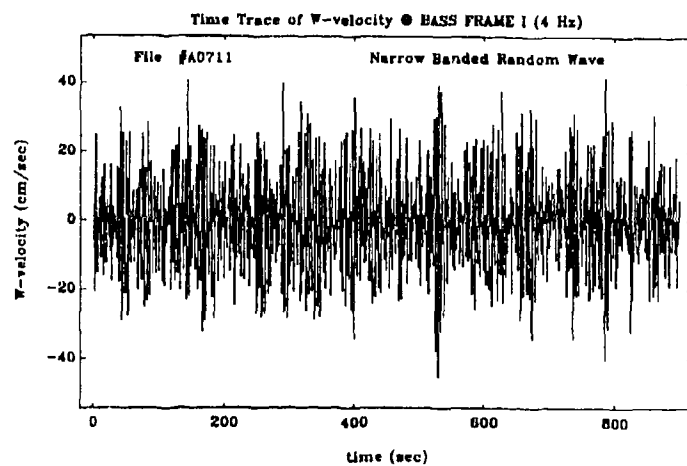


Figure 178. Time trace of interpreted velocity data

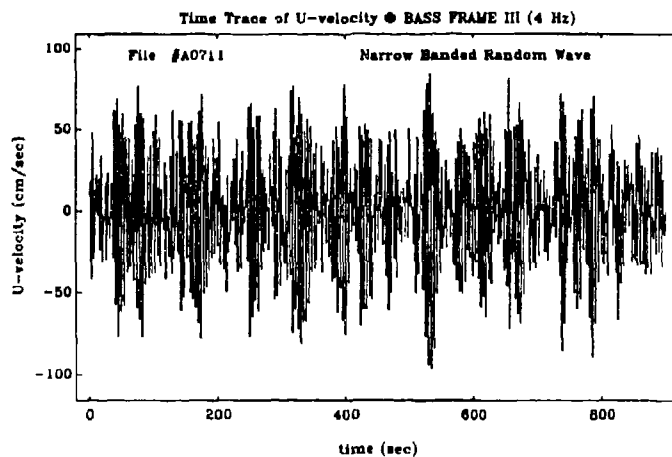


Figure 179. Time trace of interpreted velocity data

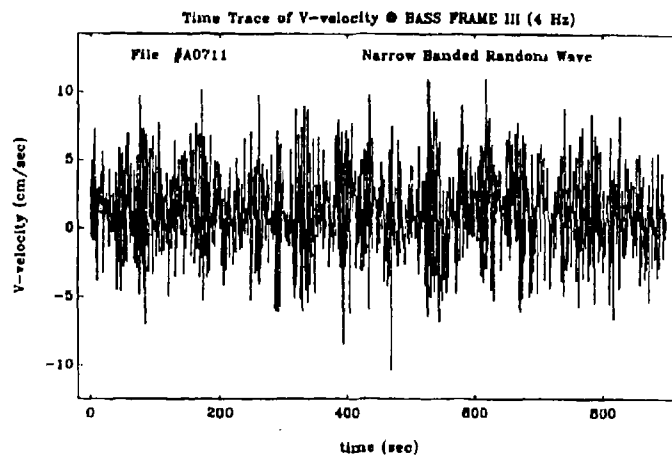


Figure 180. Time trace of interpreted velocity data

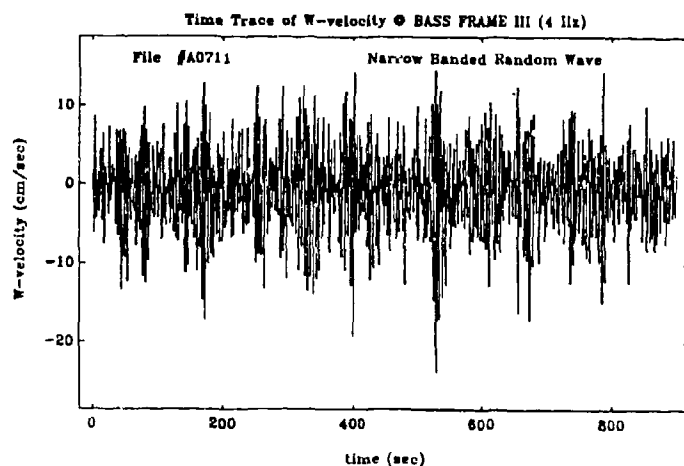


Figure 181. Time trace of interpreted velocity data

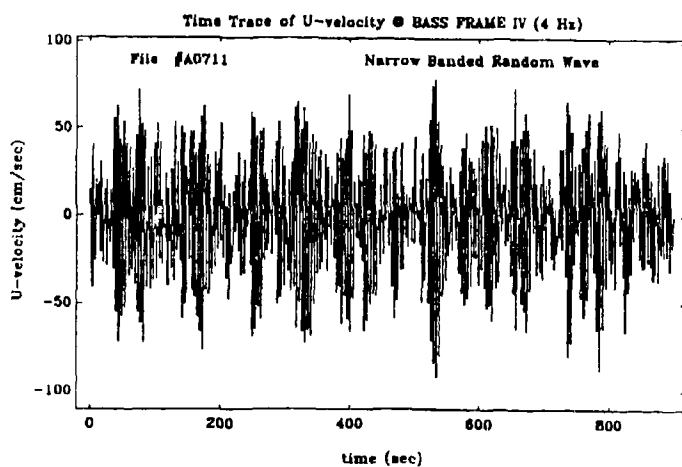


Figure 182. Time trace of interpreted velocity data

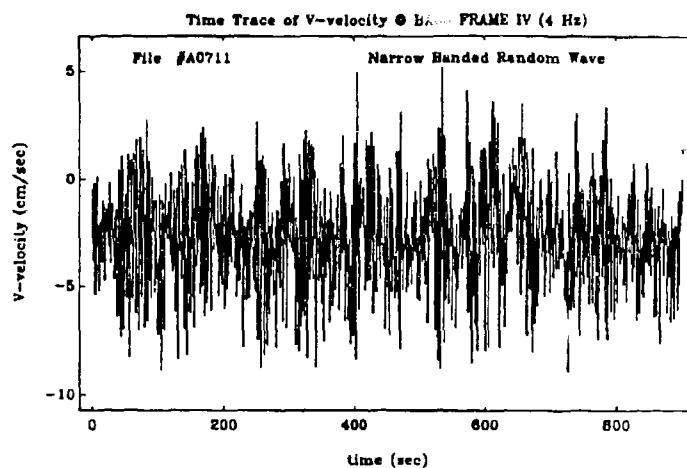


Figure 183. Time trace of interpreted velocity data

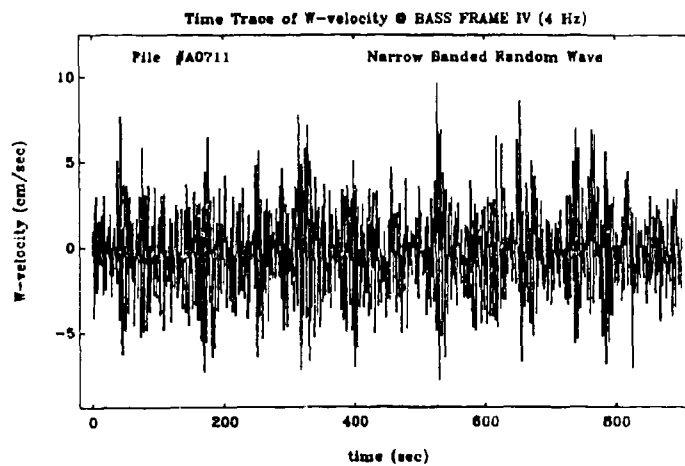


Figure 184. Time trace of interpreted velocity data

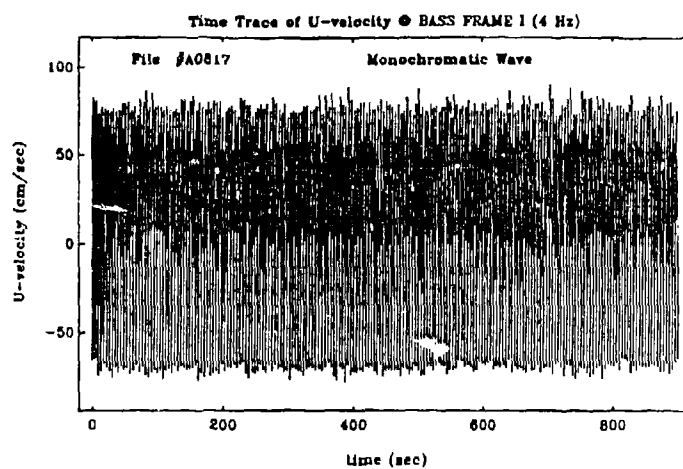


Figure 185. Time trace of interpreted velocity data

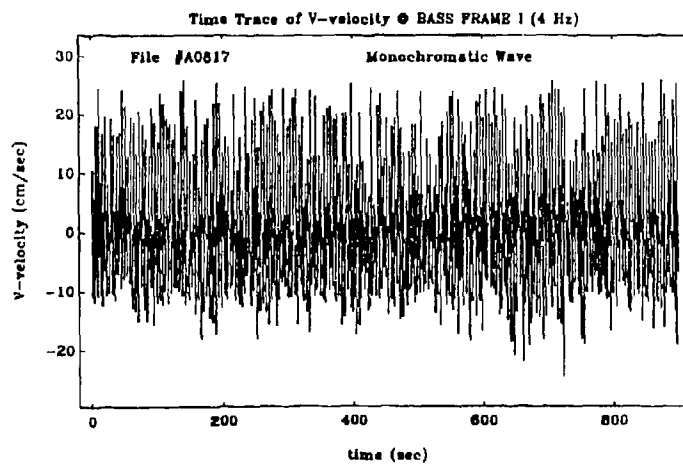


Figure 186. Time trace of interpreted velocity data

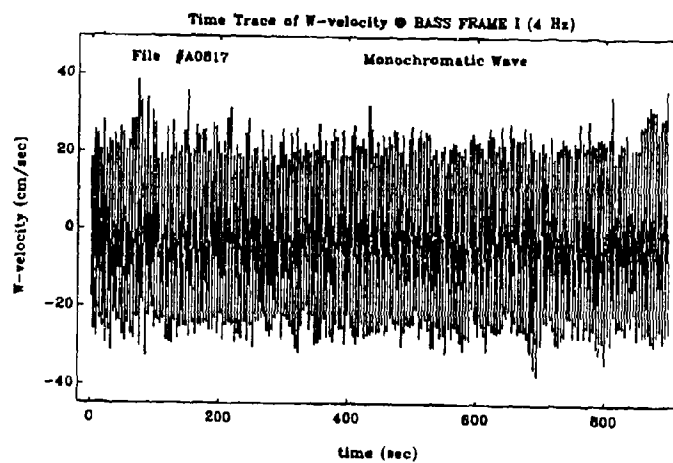


Figure 187. Time trace of interpreted velocity data

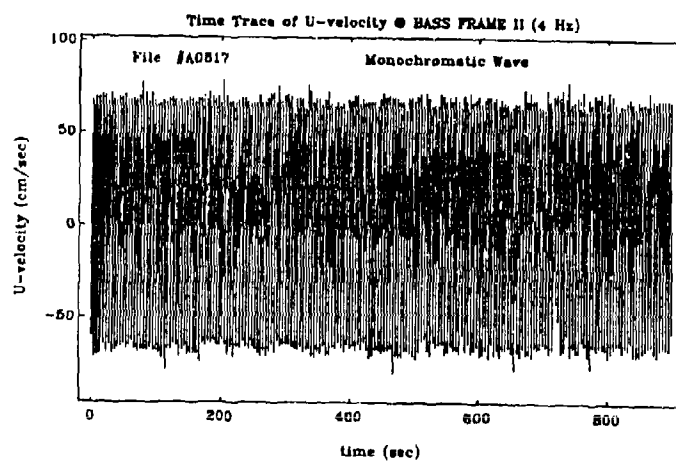


Figure 188. Time trace of interpreted velocity data



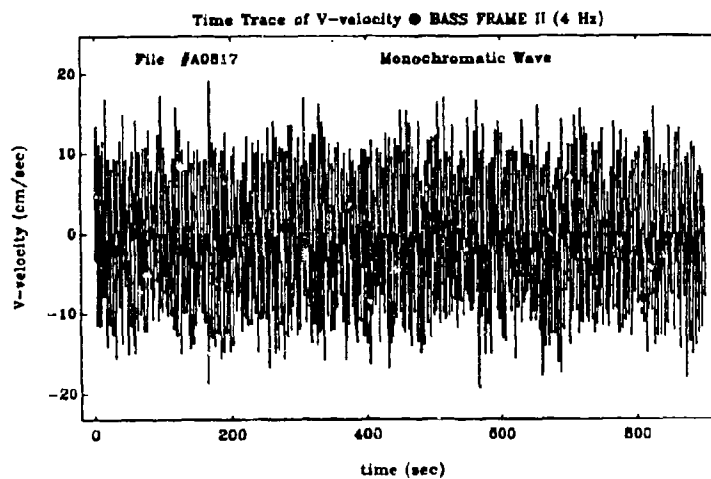


Figure 189. Time trace of interpreted velocity data

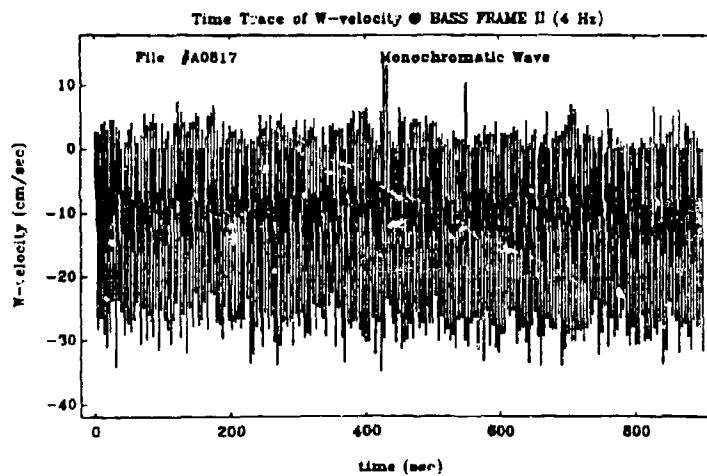


Figure 190. Time trace of interpreted velocity data

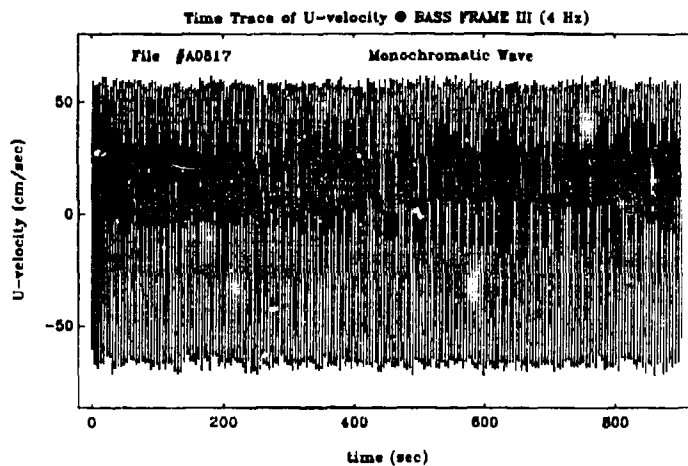


Figure 191. Time trace of interpreted velocity data

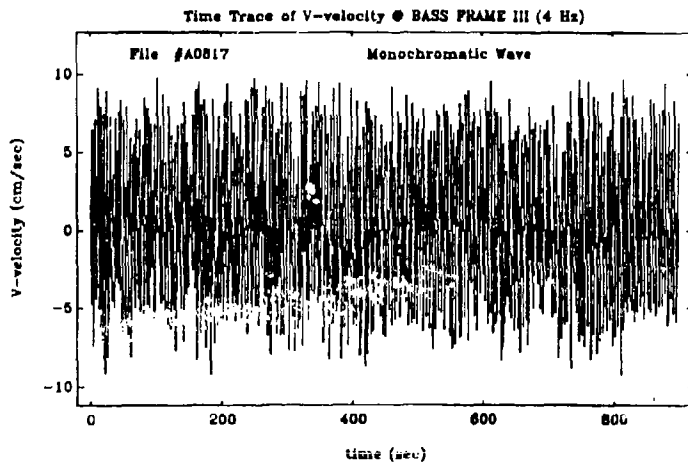


Figure 192. Time trace of interpreted velocity data

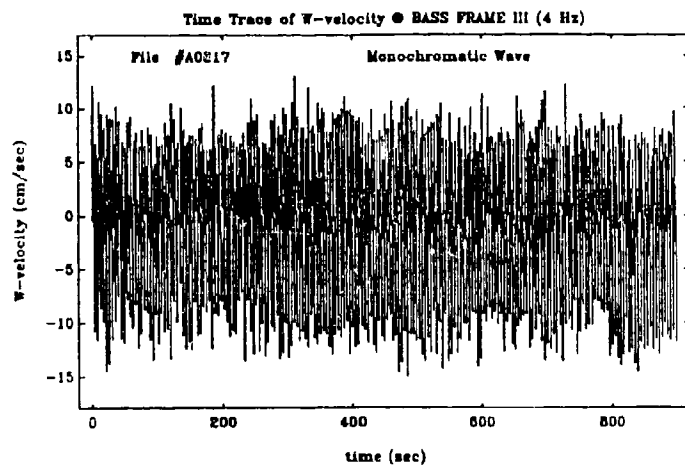


Figure 193. Time trace of interpreted velocity data

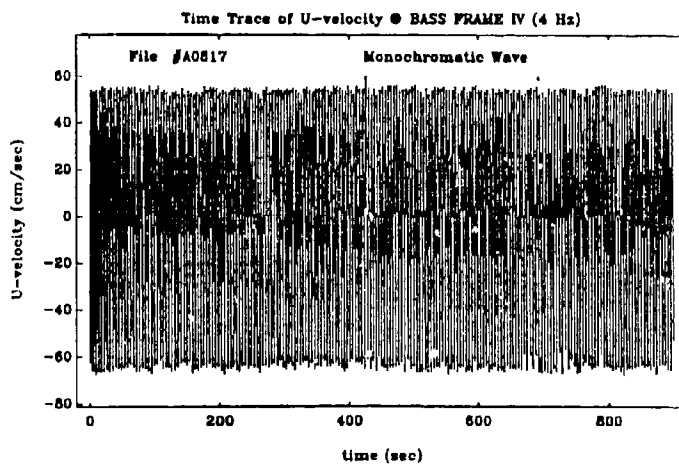


Figure 194. Time trace of interpreted velocity data

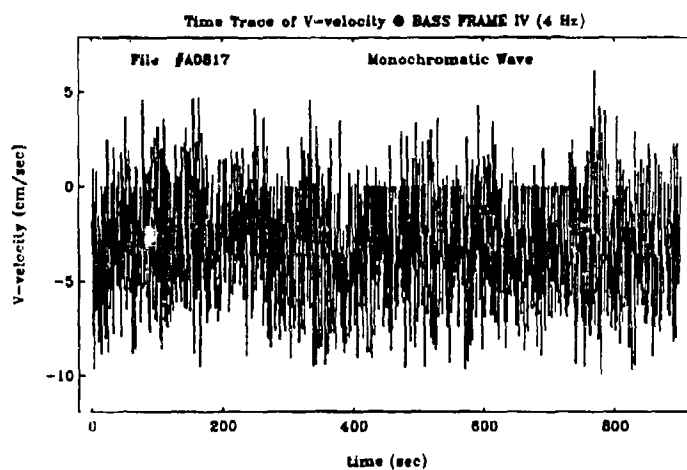


Figure 195. Time trace of interpreted velocity data

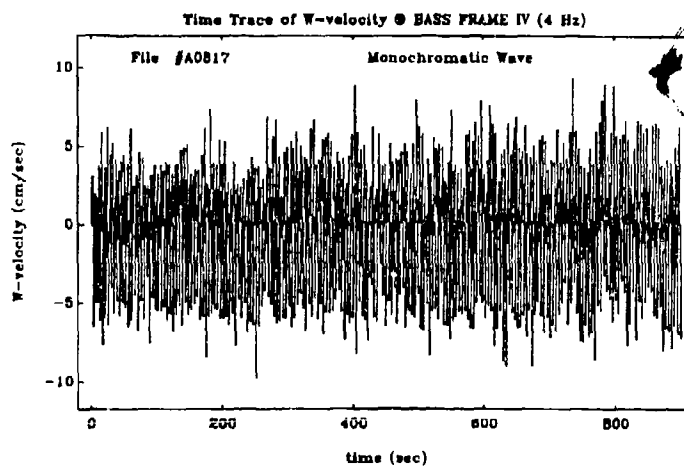


Figure 196. Time trace of interpreted velocity data

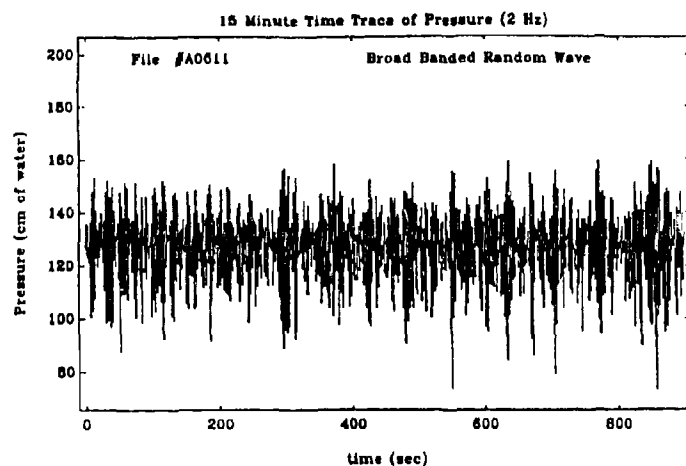


Figure 197. Time trace of interpreted pressure data

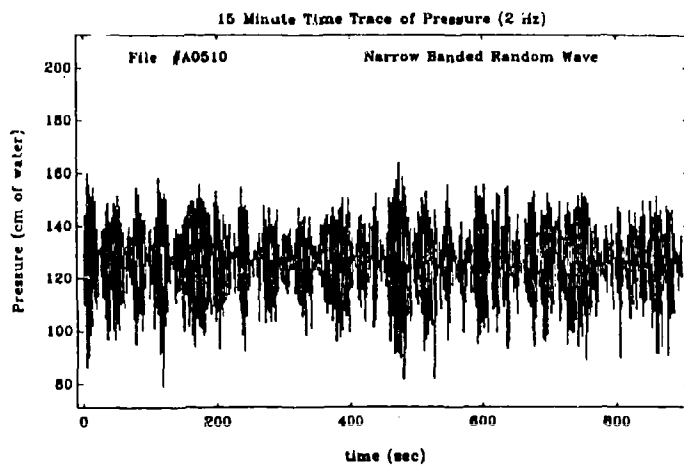


Figure 198. Time trace of interpreted pressure data

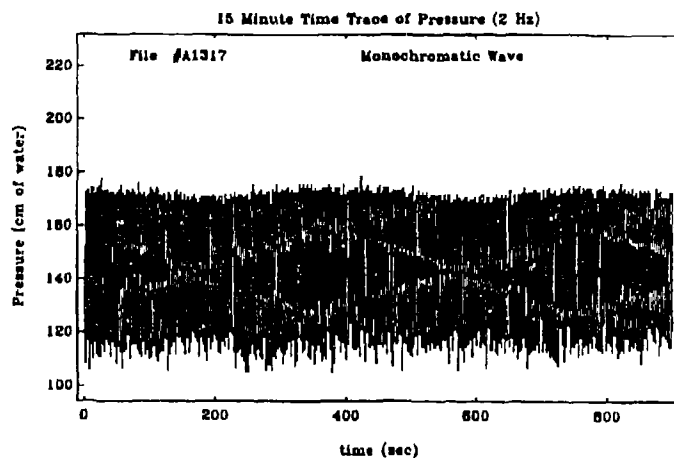


Figure I99. Time trace of interpreted pressure data

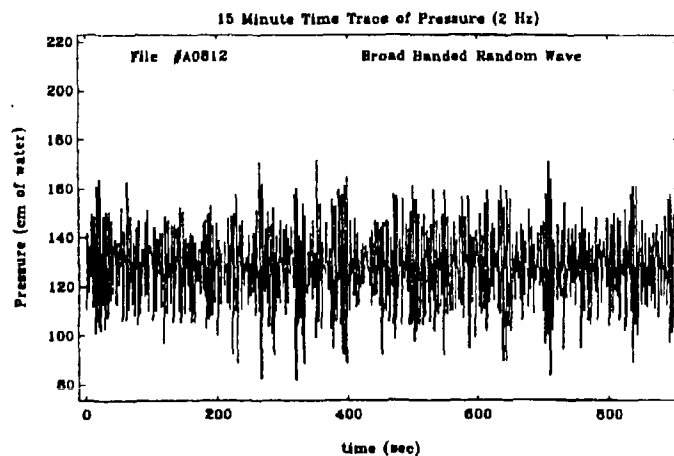


Figure I100. Time trace of interpreted pressure data

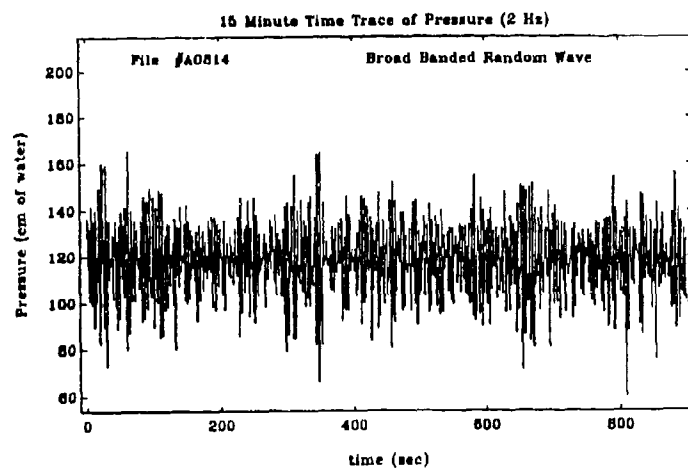


Figure 1101. Time trace of interpreted pressure data

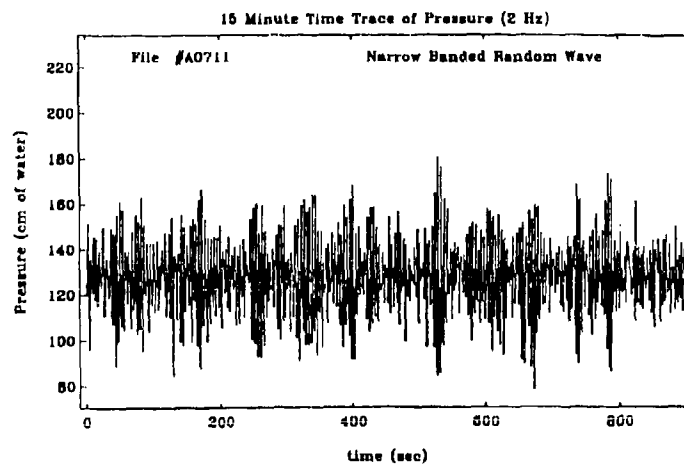


Figure 1102. Time trace of interpreted pressure data

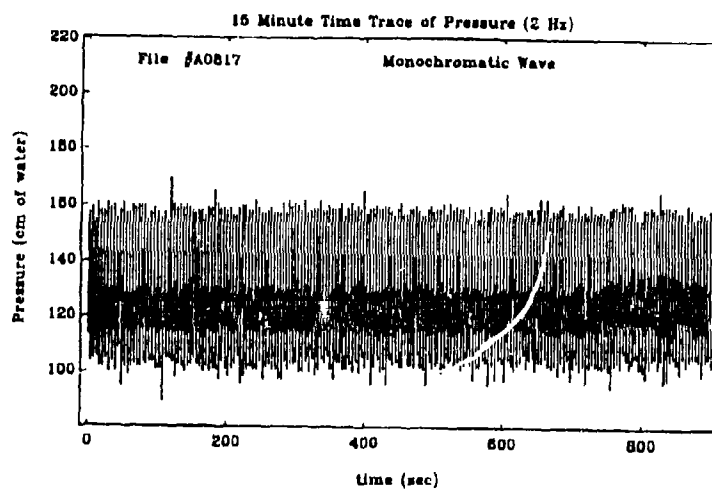


Figure 1103. Time trace of interpreted pressure data



# REPORT DOCUMENTATION PAGE

Form Approved  
OMB No. 0704-0188

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1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE September 1995		3. REPORT TYPE AND DATES COVERED Final report	
4. TITLE AND SUBTITLE SUPERTANK Laboratory Data Collection Project Volume II: Appendices A - I				5. FUNDING NUMBERS	
6. AUTHOR(S) Jane M. Smith, Nicholas C. Kraus, Editors					
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Army Engineer Waterways Experiment Station 3909 Halls Ferry Road, Vicksburg, MS 39180-6199				8. PERFORMING ORGANIZATION REPORT NUMBER Technical Report CERC-94-3	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army Corps of Engineers Washington, DC 20314-1000				10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES Available from National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.					
12a. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.				12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words)  This report provides information and data documenting a coastal processes project called the SUPERTANK Data Collection Project performed at the O. H. Hinsdale Wave Research Laboratory, Oregon State University, over the period 29 July to 20 September 1991. The objectives of the project were to (a) collect data to verify and improve existing macro-scale beach profile change numerical simulation models, (b) collect data to develop advanced hydrodynamic, cross-shore sand transport, and meso-scale beach profile change numerical simulation models, (c) collect data to quantify performance of sandbars constructed offshore as a beneficial use of dredged material, (d) test and compare sediment-sensing acoustic instruments in a controlled, field-scale environment in support of dredging research, and (e) collect data to improve understanding of micro-scale fluid and sand motion. SUPERTANK was conducted as a multidisciplinary and multi-institutional cooperative effort in which the investigators shared instrumentation and expertise.					
14. SUBJECT TERMS Beach profile change Cross-shore sediment transport Laboratory measurements Runup  Swash Undertow Wave height transformation				15. NUMBER OF PAGES 241	
				16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED	18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT		